

Historical Relationship with Adolescent Pregnancy Stunting Events in Children Age 24-60 Months in Pranggang Village, Kediri District

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ABSTRACT

Stunting is a condition where a toddler has less length or height when compared to age. Toddler stunting will have a level of intelligence that is not optimal, become more susceptible to disease and in the future, it can risk a decrease in the level of productivity which in the end, broadly stunting will be able to inhibit economic growth and increase poverty. The prevalence of stunting toddlers aged 0 to 59 months in East Java reached 32.81%. This figure is higher than the national stunting prevalence, which is 30.8%. The purpose of this study is to analyze the relationship between the history of teenage pregnancy with the incidence of stunting in children aged 24-60 months in Pranggang Kediri. Analytic survey research design with case-control survey design. The sampling technique uses Simple Random Sampling with a sample of 20 non-stunting toddlers and 19 stunting toddlers. The study was conducted in February-March 2020 in Pranggang Kediri. The analysis in this study used the Chi-square test with a significance level of 0.05. The research results showed a p-value (0.029) < 0.05, which means there is a relationship between the history of teenage pregnancy with the incidence of stunting in children aged 24-60 months in Pranggang Kediri and the results of the contingency coefficient test of 0.337, it means there is a low relationship between the history of teenage pregnancy with the incidence of stunting in children aged 24-60 months in Pranggang Kediri. Based on the results of this study it is expected that there is an increase in maternal knowledge about factors related to the incidence of stunting.

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INTRODUCTION

Stunting (dwarf) is a condition in which toddlers have a length or height that is less when compared to age (Indonesian Ministry of Health, 2018). The cause of stunting is lack of nutrition since the baby is in the womb and in the early days after the baby is born, but the condition of stunting only appears after the child is 2 years old. (Ramayulis and waningsih, 2018). Toddlers are said to be short if their z-

score value for body length for age (PB / U) or height for age (TB / U) is less than -2SD / standard deviation (stunted) and less than -3SD (severely stunted).

According to toddler prevalence data stunting obtained by the World Health Organization (WHO), Indonesia is the third country with the highest prevalence in the Southeast Asia / South-East Asia Regional (SEAR) region. The average prevalence of stunting under five in Indonesia in 2005-2017 is 36.4%. Based on Basic Health Research (Riskesdas) in 2018, the prevalence of stunting for children aged 0 to 59 months in East Java reached 32.81%. This figure is higher than the national stunting prevalence, which is 30.8%. According to WHO, if the problem of stunting is above 20% it is a public health problem (Persakmi, 2018).

The results of a preliminary study at the Kediri District Health Office in November 2019 were obtained in August 2019, namely:

Table 1 Weighing Data for Toddlers in August 2019

Weigh the month of August	
Public Health Center	Prevalence of Stunting
Pranggang Community Health Center	27.4%
Papar Community Health Center	21.39%
Gurah Community Health Center	20.47%
Sambi Health Center	20.37%

Source: Kediri District Health Office

Based on the results of a preliminary study at the Kediri District Health Office, it was found that the highest stunting rate was at the Pranggang Health Center with 27.4%. Based on the results of a preliminary study at the Pranggang Community Health Center in November 2019, the editing figures were obtained at the Pranggang Community Health Center, namely:

Table 2 Stunting Data In 2019 at the Pranggang Community Health Center, Kediri Regency

Village Name	Short	Very short	Total
Bake	66	38	104
Punjul	62	20	82
Great Source	60	18	78
Trisulor	44	31	75
Sepawon	51	19	70
Plosolor	26	7	33

Source: Recapitulation of 2019 Stunting Data at Pranggang Public Health Center, Kediri Regency

Based on the results of a preliminary study at the Pranggang Health Center, the figures were obtained stunting The highest was in Pranggang Village with 104 of 492 children under five (21.1%). This figure has begun to decline compared to 2018, which was 152 out of 561 children under five (27.1%). But this is still a problem because it is still far from the standard WHO limit, which should be the percentage of children under five with stunting <20% (Ministry of Village, 2017).

In research (Ariati, 2019) with the title Risk Factors Cause of Stunting in Toddlers Ages 23 - 59 Months, it was found that there was a significant relationship between prenatal factors (maternal age at pregnancy, maternal nutritional status during pregnancy) postnatal factors (exclusive breastfeeding, immunization history, infectious diseases), family characteristics (mother's education, father's occupation, and socioeconomic status) with the incidence of stunting.

The Health and nutrition condition of the mother before, during pregnancy, and after delivery affect fetal growth and the risk of stunting. Another factor in the mother that affects one of them is the mother's age at pregnancy. According to the Minister of Health Regulation Number 97 of 2014 concerning Health Services for the Period before Pregnancy, Pregnancy, Childbirth, and the Period after Childbirth, Contraceptive Services and Sexual Health Services, factors that aggravate the condition of pregnant women are pregnancy at a young age. Mothers who are pregnant at too young (<20 years) are at risk of giving birth to babies with low birth weight (LBW) (Ministry of Health RI, 2018). Research (Purba et al. 2016), shows that there is a significant relationship between adolescent pregnancy and the incidence of LBW with the risk of adolescent pregnancy giving birth to LBW 2.19

times greater than adult pregnancies. According to (Indonesian Ministry of Health, 2018), LBW affects about 20% of the incidence of stunting.

Based on research (Supriyanto et al. 2018), it was found that LBW children had a significant relationship with the occurrence of stunting. Children born with low birth weight were 6.16 times more likely to be stunted than children with normal birth weight. This is not in line with the research (Winowatan et al. 2017), that low birth weight babies (LBW) are not associated with the incidence of stunting.

The results of a preliminary study at the Pranggang Community Health Center in November 2019 showed the results of teenage pregnancy (<20 years) in 2019, namely:

Table 3 Data on Adolescent Pregnancy in 2019 at the Pranggang Public Health Center, Kediri Regency

Community Health Center name	Teenage Pregnancy
Bake	14
Punjul	5
Great Source	4
Trisulor	3
Sepawon	3
Plosolor	2

Source: Summary of Data for Pregnant Women at Risk in 2019 at the Pranggang Public Health Center, Kediri Regency

Pregnancy and childbirth at a young age are closely related to teenage marriage. Based on the information that has been obtained from the village apparatus of Pranggang District, getting married at a teenage age has become a culture in Pranggang Village, Kediri Regency.

From the description above, the researcher is interested in conducting a study entitled "The Relationship between Adolescent Pregnancy History and the Incidence of Stunting in Toddlers Ages 24-60 Months in Pranggang Village, Kediri Regency".

MATERIALS AND METHODS

The research design used in this study was a case-control survey design, which started by identifying stunting (cases) and non-stunting (control) toddlers, then retrospectively investigated one of the risk factors, namely adolescent pregnancy which could cause stunting in under-five. The sampling technique used was simple random sampling.

RESULTS

The sample in this study was 39 respondents with 19 cases in the case group and 20 in the control group using the Simple Random Sampling technique. Researchers collected data by the door to door to collect data on adolescent pregnancy history. This research was conducted on 28 February - 04 March 2020. In this study, the presentation of data used special data. Specific data is data based on the variables studied, namely the history of adolescent pregnancy with the incidence of stunting.

1. Teenage Pregnancy History

In this study, the history of adolescent pregnancy in mothers of toddlers aged 24-60 months in Pranggang Village is categorized into two, namely pregnant adolescents (<20 years) and not pregnant at adolescence.

Table. 4 Distribution of Frequency of Adolescent Pregnancy History in Mothers of Toddlers aged 24-60 Months in Pranggang Village, Kediri Regency

Pregnancy History Teenage Age	Frequency	Percentage (%)
Teenage pregnancy (<20 years)	12	30.8%
Not getting pregnant at adolescence	27	69.2%
Total	39	100%

Based on table 4 shows that most of the 39 respondents 27 respondents with a history of not being pregnant at the age of adolescence (69.2%). Meanwhile, almost half of them had a history of pregnancy with adolescence (<20 years), as many as 12 respondents (30.8%).

2. Incidence of Stunting in Toddlers Age 24-60 Months

In this study, incidence stunting There are two categories of children aged 24-60 months in Pranggang Village, Kediri Regency, namely stunting and non-stunting.

Table 5 Distribution of Frequency of Stunting Incidence in Toddlers Age 24-60 Months in Pranggang Village, Kediri Regency.

Stunting Incidents	Frequency				Total	(%)
	Short	(%)	Very short	(%)		
Stunting	11	57.9%	8	42.1%	19	48.7%
Not Stunting	20				20	51.3%
Total					39	100%

Based on table 5, it shows that of the 39 respondents, most of them did not experience it stunting as many as 20 respondents with a percentage (51.3%). Meanwhile, almost half of them were stunted, namely 19 respondents with a percentage (48.7%).

3. The Relationship of Adolescent Pregnancy History with Stunting Incidence in Mothers of Toddlers Ages 24-60 Months in Pranggang Village, Kediri Regency

Table 6 Cross Table of Adolescent Pregnancy History with Incidence of Stunting for toddlers aged 24-60 months in Pranggang Village, Kediri Regency

Pregnancy History Teenage Age	Stunting Incidents				amount	%	p-value
	Stunting	%	Not Stunting	%			
Teenage pregnancy (<20 years)	9	75.0	3	25.0	12	100	0.029
Not getting pregnant at adolescence	10	37.0	17	63.0	27	100	
amount	19	48.7	20	51.3	39	100	

Based on table 6 shows that of the 39 respondents of stunting and non-editing children under five, most of the children under five were stunted from mothers who had a history of pregnancy with adolescents (<20 years) as many as 9 respondents with a percentage (75.0%) and the majority of children under five were not stunted. 17 respondents who have a history of not being pregnant at the age of adolescence (63.0%).

From the results of statistical tests Chi-Square (χ^2) with an error rate of 5% using computerization, the result is $p(0.029) < \text{value } \alpha(0.05)$, so H_1 is accepted and H_0 is rejected, meaning that there is a relationship between adolescent pregnancy history and the incidence of stunting in toddlers aged 24-60 months in the village. Pranggang Kediri Regency.

DISCUSSION

This chapter will describe the results of research and discussion of the Relationship between Adolescent Pregnancy History and the Incidence of Stunting in Toddlers aged 24-60 Months in Pranggang Village, Kediri Regency. The sample in this study was 39 respondents with 19 cases in the case group and 20 in the control group using the Simple Random Sampling technique. Researchers collected data by the door to door to collect data on adolescent pregnancy history. This research was conducted on 28 February - 04 March 2020. In this study, the presentation of data used special data. Specific data is data based on the variables studied, namely the history of adolescent pregnancy with the incidence of stunting.

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CONCLUSION

Based on the results of the research and discussion that has been described in the previous chapters, it can be concluded from the results of this study obtained in Pranggang Village, Kediri Regency as follows:

1. Almost half of the mothers aged 24-60 in Pranggang Village, Kediri Regency, have a history of teenage pregnancy
2. Nearly half of toddlers aged 24-60 months in Pranggang Village, Kediri Regency, are stunted
3. Most of the children under five who are stunted come from mothers with a history of pregnancy in adolescence (<20 years).
4. There is a low relationship between the history of teenage pregnancy and the incidence of stunting in toddlers aged 24-60 months in Pranggang Village, Kediri Regency, 2020

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CONFLICTS OF INTEREST

The author declares that they have no conflict of interest

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