

FACTORS RELATED TO STUNTING IN CHILDREN AGED 24-59 MONTHS

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ABSTRAK FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN STUNTING PADA ANAK USIA 24-59 BULAN

Latar belakang masalah gizi yang menjadi perhatian utama saat ini adalah tingginya angka stunting. Pada tahun 2020 jumlah balita usia 24-59 bulan yang mengalami stunting di Kabupaten Tulang Bawang sebanyak 2235 kasus dengan 200 kasus stunting atau 23,04% terdapat di wilayah kerja Puskesmas Gedung Rejo sakti.

Tujuan penelitian untuk mengetahui faktor-faktor yang berhubungan dengan kejadian stunting pada anak usia 24-59 bulan di wilayah kerja Puskesmas Gedung Rejo Sakti Kabupaten Tulang Bawang tahun 2021.

Metode penelitian adalah kuantitatif dengan pendekatan case control. Sampel kasus dalam penelitian ini adalah balita stunting usia 24-59 bulan. Teknik pengambilan sampel dilakukan dengan cara random sampling sampai jumlah sampel yang dibutuhkan mencukupi. Analisis data menggunakan uji chi-square.

Hasil analisis menunjukkan 67 anak (50%) mengalami stunting, 15 ibu hamil (11,2%) berisiko tinggi badan, 47 ibu hamil (35,1%) dengan riwayat anemia selama kehamilan dan sebanyak 12 anak (9 %)) dengan riwayat BBLR.

Kesimpulan Ada hubungan yang bermakna antara tinggi badan ibu (p value = 0,028) dan riwayat anemia (p value = 0,011) dengan kejadian stunting pada balita di wilayah kerja Gedung Rejo Sakti tahun 2021 dan variabel yang paling mempengaruhi kejadian tersebut stunting adalah anemia.

Saran bagi Puskesmas untuk melakukan penyuluhan secara berkala kepada masyarakat khususnya ibu hamil dan membagikan pamflet untuk mendapatkan deteksi dini anemia pada ibu hamil dan melakukan pengobatan dini.

Kata kunci : Anemia, Balita, Puskesmas Gedung Rejo Sakti Tulang Bawang, Stunting.

ABSTRACT

Background of the nutritional problems that has become a major concern presently is the high number of stunting. In 2020 the number of toddlers aged 24-59 months who experienced stunting in Tulang Bawang Regency was 2235 cases with 200 stunting cases or 23.04% found in the working area of Gedung Rejo sakti Health Center.

Purpose of the study was to determine the factors related to the incidence of stunting in children aged 24-59 months in the working area of the Gedung Rejo Sakti Health Center, Tulang Bawang Regency in 2021.

Research method design was quantitative with a case control approach. The sample cases in this study were stunted toddlers aged 24-59 months. The sampling technique was carried out by random sampling until the required number of samples was sufficient. Data analysis was chi-square test.

Results of the analysis showed that 67 children (50%) were stunted, 15 pregnant women (11.2%) with body height at risk, 47 pregnant women (35.1%) with a history of anemia during pregnancy and as many as 12 children (9%)) with a history of LBW.

Conclusion There is a significant relationship between maternal height (p value = 0.028) and history of anemia (p value = 0.011) with the incidence of stunting in toddlers in the working area of Gedung Rejo Sakti in 2021 and the most affecting variable in the incidence of stunting is anemia.

Suggestions for health center to conduct regular counselling to the community, especially for pregnant women and distribute pamphlets to get early detection of anemia in pregnant women and carry out early treatment.

Keywords: Anemia, Stunting, Toddlers, Gedung Rejo Sakti health center of Tulang Bawang,.

INTRODUCTION

Indonesia is still experiencing nutritional problems that have a serious impact on the quality of

human resources. One of the nutritional problems that has become a major concern at this time is the high number of stunted children (Kemendes RI, 2017). Stunting or shortness is a condition of failure to thrive in infants (0-11 months) and children under five (12-59 months) as a result of chronic nutritional deficiencies, especially in the first 1,000 days of life so that children are too short for their age. Malnutrition occurs since the baby is in the womb and in the early days after the baby is born, but the stunting condition only appears after the child is 2 years old (Ramayulis, 2018).

Toddlers are classified to be short if the z-score value for body length for age (LAZ) or height for age (HAZ) is less than -2SD/standard deviation (stunted) and less than -3SD (severely stunted). The problem of short toddlers illustrates the existence of chronic nutritional problems (Kemenkes, 2016). It is estimated that there were 162 million stunted children in 2012, if the trend continues without efforts to reduce it then it is projected to be 127 million by 2025. About 56% of stunted children live in Asia and 36% in Africa (Ministry of Health, 2016). The World Health Organization reports that one in four children (26%, 165 million) is estimated to be stunted (Hardiansyah & Supariasa, 2017).

Stunting or shortness is a condition of failure to thrive in infants (0-11 months) and children under five (12-59 months) as a result of chronic nutritional deficiencies, especially in the first 1,000 days of life so that children are too short for their age. Malnutrition occurs since the baby is in the womb and in the early days after the baby is born, but the stunting condition only appears after the child is 2 years old.

The bad impact caused by stunting in the short term is disruption of brain development, intelligence, impaired physical growth, and metabolic disorders in the body. Whereas in the long term the bad consequences that can be caused are decreased cognitive abilities and learning achievement, decreased immunity so that they are easy to get sick, and a high risk for the emergence of diabetes, obesity, heart and blood vessel disease, cancer, stroke, and disability in old age. (Ministry of Health RI, 2017).

The Global Nutrition Report shows that Indonesia is included in 17 countries, which have three nutritional problems, namely stunting, wasting and overweight in children under five (Kemenkes, 2016). According to WHO, the prevalence of stunted toddlers becomes a public health problem if the prevalence is 20% or more. Therefore, the percentage of stunted toddlers in Indonesia is still high and is a health problem that must be addressed.

Compared to several neighboring countries, the prevalence of stunting in Indonesia is also the highest compared to Myanmar (35%), Vietnam (23%), Malaysia (17%), Thailand (16%) and Singapore (4%). Currently, Indonesia is one of the countries with a fairly high prevalence of stunting compared to other middle-income countries (Ramayulis, 2018). Approximately 8.9 million Indonesian children experience suboptimal growth, or 1 in 3 Indonesian children experience stunting. More than 1/3 of children under 5 years old in Indonesia are below the average height (Kemenkes, 2017). Based on the 2015 NSA results, 29% of Indonesian children under five were in the short category (Ministry of Health, 2016). The results of Riskesdas 2018 show that the prevalence of stunting in the national scope is still high at 30.8%.

Stunting is the impact of various factors such as low birth weight, inappropriate stimulation and parenting, inadequate nutritional intake, and repeated infections as well as various other environmental factors (Fikawati, et al, 2017). According to the United Nations Children's Fund (2013) more than 20 million babies (about 15% globally) are born with low birth weight. Babies with low birth weight are at risk of health problems and short or long term growth barriers (Hardiansyah & Supariasa, 2017). LBW will carry the risk of death, impaired growth and development of children, including the risk of becoming short if not handled properly (Kemenkes RI, 2016). Lampung Province is one of the provinces in Indonesia with a fairly high number of stunting events. Based on the results of Riskesdas 2018, the number of stunting cases in Lampung was 27.3% and based on nutritional status assessment (NSA) of toddlers in Lampung Province, it was found that the percentage of stunting toddlers in the province continued to increase, namely 22.7% in 2015, 24.8% in 2015. in 2016 and to 31.6% in 2017.

One of the regency that contributes to the high incidence of stunting is Tulang Bawang Regency. Based on the results of data collection in 2020, the number of toddlers aged 24-59 months who experienced stunting in Tulang Bawang were 2235 cases with 200 stunting cases or 23.04% found in the working area of Gedung Rejo Sakti Health Center. The working area of the Gedung Rejo Sakti Health Center is the sub-district that contributes the second highest incidence of stunting toddlers in Tulang Bawang Regency. In addition, if pointing at the trend in the incidence of stunting under five in the working area of the Gedung Rejo Sakti Health Center, there has also been an increase from the previous year, from 173 stunting toddlers in 2019 to 200 stunting in

toddlers aged 24-59 months in 2020. The study aims to determine the factors that are associated with stunting in the working area of Gedung Rejo Sakti Tulang Bawang Health Center in 2021.

RESEARCH METHODOLOGY

This quantitative research is carried out from March to June in the working area of Gedung Rejo Sakti Health Center in 2021. The case control research design is due to the similarity of time measures between the case group and the control group, the limitation or control of risk factors so that the results of the study are sharper than the results of cross sectional design, does not face ethical constraints as in experimental or cohort research, and does not require a long time (more economical) (Notoatmodjo, 2012).

The population of all toddlers aged 24-59 months who are stunted in the working area of the Gedung Rejo Sakti Health Center in 2021 total of 200 toddlers. While the population in the control is all toddlers aged 24-59 months with normal height as many as 860 Toddlers 24-59 months. The samples in the case group were 67 toddlers aged 24-59

months who experienced stunting. While the samples in the control group were 67 toddlers aged 24-59 months with normal height.

The sample size was calculated using the Slovin formula. Based on the sample calculation above, the minimum number of samples in this study was 67 people. The researcher then used a ratio of 1: 1 so that the number of samples in the case group in this study amounted to 67 stunting children, and the number of samples in the control group in this study were 67 toddlers with normal height, so the number of samples in this study was 134 toddlers. The sampling technique was then carried out by random sampling until the required number of samples was sufficient.

RESEARCH RESULT

Univariate Analysis

Frequency Distribution of Maternal Height

Based on table 1 above, it can be seen that from 15 pregnant women with height at risk there were 12 people whose children were stunted and 3 people whose children were not stunted.

Table 1
Frequency Distribution of Maternal Height in Working Area of Gedung Rejo Sakti Health Center in 2021

Height	Case		Control		Total
	N	%	N	%	
At risk	12	17.9	3	4.5	15
No risk	55	82.1	64	95.5	119
Total	67	100	67	100	134

Frequency Distribution of History of Anemia in Pregnant Women

Based on table 2 above, it can be seen that from 47 pregnant women with a history of anemia

during pregnancy, there were 31 (46.3%) mothers whose children were stunted and 16 mothers whose children were not stunted.

Table 2
Frequency Distribution of History of Anemia in Pregnant Women in the Working Area of Gedung Rejo Sakti Health Center in 2021

Anemia	Case		Control		Total
	N	%	N	%	
Anemia	31	46.3	16	23.9	47
No	36	53.7	51	76.1	87
Total	67	67	134	100	134

Frequency Distribution of Birth Weight

Table 3

Frequency Distribution of Birth Weight in Children aged 24-59 Months In the Working Area of Gedung Rejo Sakti Health Center in 2021

Birth Weight	Case		Control		Total
	N	%	N	%	
LBW	9	13.4	3	4.5	12
Normal	58	86.6	64	95.5	122
Total	67	67	134	100	134

Based on table 3 above, it can be seen from 12 children with a history of LBW, there were 9 children who experience stunting.

Bivariate Analysis

Relationship of Maternal Height with Stunting

The analysis results of maternal height with stunting obtained that from 67 groups of stunting children, 12 children (17.9%) had mothers with a high-risk height and 55 children (82.1%) who had mothers with a height not at risk.

The results of the statistical test obtained a P-value = 0.028 (P < 0.05), which means that there was a statistically significant relationship between maternal height and the incidence of stunting of toddlers in Gedung Rejo Sakti Health Center in 2021. From the analysis also resulted, an OR value of 4.6 (95% CI: 1.2-17.3), which means that women with height <145 cm have a 4.6 times higher risk of having stunting children compared to women with height > 145 cm.

Table 4
Relationship of Maternal Height with Stunting in the working area of Gedung Rejo Sakti Health Center in 2021

Height	HAZ				Total N	P- Value	OR (95% CI)
	Stunting		Not stunting				
	N	%	n	%			
at risk	12	17.9	3	4.5	15	0.028	4.6 (1,2-17,3)
No risk	55	82.1	64	95.5	119		
Total	67		67		134		

Relationship History of Anemia in Pregnant Women with Stunting

Based on the results of data processing to determine the relationship between the history of

anemia in pregnant women and stunting, the following results were obtained.

Table 5
Relationship History of Anemia in Pregnant Women With Stunting in the working area of Gedung Rejo Sakti Health Center in 2021

History of Anemia	HAZ				Total N	P- Value	OR (95% CI)
	Stunting		Not stunting				
	N	%	N	%			
Anemia	31	46.3	16	23.9	47	0.011	2.7 (1,3-5.7)
No	36	53.7	51	76.1	87		
Total	67		67		134		

Relationship between the history of anemia in pregnant women and stunting in the working area of Gedung Rejo Sakti obtained data that from 67 groups of stunted children, 31 children (46.3%) had mothers with a history of anemia during pregnancy and 36

children (53,7%) who have mothers without a history of anemia in pregnancy.

The results of the statistical test obtained a P-value = 0.011 (P < 0.05), which means that there was a statistically significant relationship between a history of anemia in pregnant women and the

incidence of stunting toddler in the working area of Gedung Rejo Sakti Health Center in 2021. From the results of the analysis, it is obtained The OR value was 2.7 (95% CI: 1.3-5.7), which means that mothers with a history of anemia had a 2.7 times higher risk of having stunting children compared to women who did not have a history of anemia in pregnancy..

Relationship between birth weight and Stunting

Based on results data processing to know the relationship of birth weight with Stunting obtained results as follow:

Table 6
Relationship history of birth weight with Stunting in the working area of Gedung Rejo Sakti Health Center in 2021

Birth Weight	HAZ				Total N	P-Value
	Stunting		Not stunting			
	N	%	N	%		
LBW	9	13.4	3	4.5	12	0.130
Normal	58	86.6	64	95.5	122	
Total	67		67		134	

From the analysis of the relationship between history of birth weight with stunting obtained data that from 67 groups of stunting children , 9 children (13.4%) had a history of low birth weight. and 58 children (86.6 %) children with normal birth weight.

The results of the statistical test showed a P-value = 0.130 (P < 0.05), which means that there was no statistically significant relationship between

birth weight and stunting toddler in the working area of Gedung Rejo Sakti Health Center in 2021.

Multivariate Analysis

Based on table 7 above, it can be seen that the most dominant factor in the incidence of stunting is anemia.

Table 7.
Multivariate Final Model

Variable	Sig	Exp (B)	95% CI	
			Lower	Upper
Height	0.017	5,137	1,342	19,670
Anemia	0.006	2,914	1,367	6,215

DISCUSSION

Univariate Analysis

Distribution of Toddlers Ages 24-59 months with Stunting

Based on the results of the study, it can be seen that the number of children aged 24-59 months who experience stunting in the working area Gedung Rejo Sakti Health Center in 2021 is 67 children (50%).

Stunting or also called as "short" is a condition of growth failure in infants (0-11 months) and children (12-59 months) due to chronic malnutrition, especially in the first 1,000 days of life so that children are too short for their age. Malnutrition occurs since the baby is in the womb and in the early days after the baby is born, but the stunting condition only appears after the child is 2 years old (Ramayulis, et al, 2018).

Stunting is a chronic condition of poor linear growth of a child which is the accumulation of the impact of various factors such lack of nutrition and past health history and after the child birth. Stunting is the impact of malnutrition that occurs over a long period of time which ultimately causes linear growth inhibition (Fikawati, et al, 2017).

Stunting can be the best proxy measure for health disparities in children. This is because stunting describes various health dimensions, development and living environment of children. Stunting growth describes a potential linear growth failure that should be achieved, and is the impact of poor health and nutritional condition of people. At the population level, high rates of stunting are associated with low socio-economic status and an increased risk of exposure to adverse conditions, such as disease and inadequate feeding practices. On the other hand, a decrease in the national stunting rate indicates an

improvement in the overall socio-economic condition of a country. The prevalence of stunting in the world varies from 5% to 65% in less developed countries (Fikawati, et al, 2017).

The high incidence of stunting at the Gedung Rejo Sakti Health Center reflects the chronic condition of poor growth of a child which is the accumulation of the impact of various factors such as poor nutrition and past health history and after the child birth. Most of the mothers Gedung Rejo Sakti prefer to use instant supplementary food, so that the menu given to children is less varied.

Frequency distributions of maternal height

Based on this study, there were 15 pregnant women (11.5%) with height at risk. The mother's short height can also increase the risk of size disparities between the size of the baby's head and the mother's pelvis. Due to inappropriate proportions, short mothers cannot perform vaginal births or spontaneous vaginal deliveries which can increase the risk of maternal death and the short to long term. If on time to the hospital with complete equipment, a cesarean section can be performed. However, cesarean section also has considerable complications that can endanger the health of both mother and child. Failure of a child to be born by cesarean section on time can lead to difficult delivery with more serious consequences (Fikawati, et al, 2017).

Frequency distribution of anemia in pregnant women

It can also be seen on this study that there were 47 pregnant women (35.1%) with a history of anemia during pregnancy.

Anemia of pregnancy has the potential to harm both mother and child. That's why anemia requires serious attention from all parties involved in health services at the forefront (Manuaba, 2012). In pregnancy, oxygen demand is higher, which triggers an increase in erythropoietin production. As a result, the volume of plasma increases and red blood cells (erythrocytes) increase. However, the increase in plasma volume occurs in a larger proportion when compared to the increase in erythrocytes so that the decrease in hemoglobin concentration (Hb) is due to hemodilution. The relationship between Hb concentration and pregnancy is still a subject of controversy. The effect of anemia in pregnancy is that abortion, premature parturition, hyperemesis gravidarum, antepartum bleeding, premature rupture of membranes can occur. The danger of anemia to the fetus, even though it seems that the fetus is able to absorb various needs from its mother, but with anemia it will reduce the body's metabolic ability so

that it interferes with the growth and development of the fetus in the womb. As a result of anemia, intrauterine death can occur, high preterm labor, abortion, low birth weight, congenital defects in infants, babies are susceptible to infection, low intelligence (Manuaba, 2012).

Frequency distribution of birth weight

Based on the results of the study, from 67 children in the stunting group there were 12 children (9 %) with a history of LBW. A child born with LBW will grow up to be stunted. Babies born with low birth weight can experience digestive tract disorders because they are not functioning perfectly so that food absorption is not good and has electrolyte disturbances. Low birth weight babies also experience breastfeeding problems because the baby's body size is small, weak and has a small stomach and can't suck well. As a result, the baby's growth will be disrupted, if this situation continues with inappropriate feeding such as not exclusive breastfeeding, the child often experiences infections and grows into stunting (Sari, 2016).

Low birth weight (<2500 g) is still a major cause of mortality and morbidity. Low birth weight babies are differentiated into babies born prematurely and babies who have stunted fetal growth. In developed countries, about 2/3 of low birth weight babies are caused by prematurity, while in developing countries LBW is caused by stunted fetal growth (Fadlun & Ferryanto, 2012). Low birth weight (LBW) babies are still a problem in the health sector, especially perinatal health. LBW consists of LBW less months and LBW with months/more months (Kemenkes RI, 2011).

Bivariate Analysis

Relationship of Maternal Height with Stunting

Relationship analysis between a history of anemia in pregnant women and stunting can be seen that from the 67 groups of stunting children, there were 12 children (17.9%) who had mothers with a height at risk and 55 children (82.1 %) who had mothers with a height not at risk.

From the results of the statistical test obtained a P-value = 0.028 (P <0.05), which means that there is a statistically significant relationship between maternal height and stunting in the working area of Gedung Rejo Sakti Health center in 2021. This analysis also resulted the OR value is obtained of 4.6 (95% CI: 1.2-17.3) , which means that mothers with height <145 cm have a 4.6 times higher risk of having stunting children compared to women with height > 145 cm.

A woman with a height of less than 145 cm is at risk for impaired survival, health, and the development of her offspring in the future. Stunting in pregnant women can cause obstruction of blood flow to the fetus and the growth of the uterus, placenta and fetus. Intrauterine growth restriction (IUGR) or fetal growth retardation can have an impact on poor outcomes for the fetus and newborn. During pregnancy IUGR can cause chronic fetal distress or fetal death. If born alive, a stunted baby has a higher risk of developing serious medical complications. IUGR babies usually have neurological and intellectual developmental delays, as well as low height. This will generally last into adulthood (Fikawati, et al, 2017).

Short height can also increase the risk of size disparities, between the size of the baby's head and the mother's pelvis. Because of inappropriate proportion, short mothers are more likely to be unable to have a vaginal birth or spontaneous vaginal delivery which can increase the risk of maternal death and short- to long-term disability. If referred in time to a fully equipped hospital, a cesarean section can be performed. However, cesarean section also carries a high risk of complications that can endanger the health of the mother and child. Failure to deliver a child by cesarean section on time can lead to difficult delivery with more serious consequences. These consequences include injury to the birth canal, postpartum hemorrhage, uterine rupture, genital sepsis or fistula that can lead to incontinence. The most severe impact, difficulty giving birth can cause maternal death (Fikawati, et al, 2017).

From the results of this study, it can be seen that there are still many mothers with height risk or < 145 cm, especially in the stunting group. This condition reflects the lack of nutritional intake during the growth period by mothers of toddlers. Nutrition intervention is very important to prevent stunting and malnutrition for the next generation, especially toddlers in the working area of Gedung Rejo Sakti Health Center.

Relationship History of Anemia in Pregnant Women with Stunting

The analysis result of the relationship between a history of anemia in pregnant women and stunting can be seen that from the 67 groups of stunting toddler, 31 toddler (46.3%) had mothers with a history of anemia during their childhood pregnancy and 36 children (53.7 %) who had mothers without a history of anemia in pregnancy.

Results from the statistical test obtained a P-value = 0.011 (P <0.05), which means that there is a statistically significant relationship between a history

of anemia in pregnant women and stunting toddler in the working area of Gedung Rejo Sakti Health Center in 2021. This results also obtained The OR value was 2.7 (95% CI: 1.3-5.7) , which means that mothers with a history of anemia had a 2.7 times higher risk of having stunting child compared to women who did not have a history of anemia in pregnancy.

This study are in line with the results of Widyaningrum's research (2018) regarding the relationship between anemia status of pregnant women and the incidence of stunting in toddlers aged 24-59 months in the Gedangsari II Health Center Gunung Kidul which shows a relationship between a history of anemia in pregnant women and the incidence of stunting in toddler in Ketandan Dagangan Madiun vilage with p value = 0.0003. The results of this study are also in line with the Pongrekun Research (2020) regarding Factors Associated with Stunting Incidence in South Konawe Regency which shows a significant relationship between a history of anemia in pregnant women and the incidence of stunting toddler, as well as the results of Pratiwi's research (2017) on The Relationship of Anemic Pregnant Women with Stunting in Newborns at Wonosari Hospital Gunung Kidul in which showed a relationship between a history of anemia in pregnant women and the incidence of stunting with p = 0.023.

One of the danger signs of pregnancy is anemia (Hb 9), so that fetal growth is disrupted due to lack of nutrients and oxygen to the placenta (BKKBN, 2017). Anemia that occurs during pregnancy is associated with the incidence of LBW and an increased risk of maternal and perinatal mortality. It is estimated that 90,000 maternal and neonatal deaths are caused by iron deficiency anemia. In addition, iron nutritional anemia in pregnant women is also associated with increased perinatal complications and premature birth (Fikawati & Syafiq, 2017).

The researcher assumed that the high proportion of anemic pregnant women in this study was due to the lack of adequate nutritional intake for the mother during pregnancy which then had an impact on the high incidence of stunting in children under five.

Relationship between birth weight and stunting

The results of the analysis of the relationship between a history of anemia in pregnant women and stunting can be seen that from the 67 groups of stunting, 9 toddlers (13.4%) had a history of low birth weight and 58 toddlers (86.6 %) with normal birth weight.

Results of the statistical test obtained a P-value = 0.130 ($P > 0.05$), which means that there is no statistically significant relationship between birth weight and stunting toddler in the working area of Gedung Rejo Sakti Health Center in 2021.

Babies born with low birth weight can experience digestive tract disorders because they are not functioning perfectly so that food absorption is not good and has electrolyte disturbances. Low birth weight babies also experience breastfeeding problems because the baby's body size is small, weak and has a small stomach and can't suck well. As a result, the baby's growth will be disrupted, if this situation continues with inappropriate feeding such as not exclusive breastfeeding, the child often experiences infections and grows into stunting (Sari, 2016).

This study results indicate that there is no significant relationship between birth weight with stunting toddler in the working area of the Gedung Rejo Sakti Health Center in 2021. This condition may be due to the stunting experienced by toddlers in this area that can cause toddlers to experience chronic malnutrition, among others, is the pattern of giving complementary foods to breast milk that is not varied, because mothers make more use of the use of instant packaged products which are considered more practical.

Dominant variable of stunting

The result analysis from the last multivariate model it is known that Mother pregnant with history of anemia in the 3rd trimester has meaningful relationship with stunting (p- value 0.006) and pregnant women with history of anemia risk 2.9 bigger to have stunting child. Whereas on women who have height less than 145 cm associated with stunting (p- value 0.017) and risk 5.1 bigger to own stunting child. The dominant variable that affects the stunting in toddler aged 24-59 months at the Gedung Rejo Sakti Health Center in 2021 is anemia. Based on the results of this study, it is also known that the proportion of anemic pregnant women in the working area of the Gedung Rejo Sakti is quite high (35.1%). The high percentage of pregnant women who experience anemia in this area may be due to a lack of iron consumption from food or the low absorption of iron in food.

Iron from food that is not sufficient for the body's needs will result in the body experiencing nutritional anemia. A less diverse diet, such as a menu that only consists of rice and beans, contributes to the lack of iron intake for the body. The absorption of iron from plant foods is much lower than the absorption of iron from animal foods. A diverse

diet, such as sufficient animal food (meat, fish) coupled with sources of vitamin C to increase iron absorption will increase the availability of iron in food. The danger of anemia to the fetus, even though it seems that the fetus is able to absorb various needs from its mother, but with anemia it will reduce the body's metabolic ability so that it interferes with the growth and development of the fetus in the womb, so that health services provided to the mother during pregnancy are given by giving iron tablets of at least 90 tablets during pregnancy is very important.

Based on the observations of the researchers, the tendency to consume fruits and vegetables was still low by pregnant women at the Gedung Rejo Sakti. The consumption of tea and coffee after eating which is a habit by pregnant women at the Gedung Rejo Sakti also contributes to the incidence of iron nutritional anemia. Irregular eating habits and low consumption of animal food sources contribute to anemia.

During pregnancy, blood volume will continue to increase. This means more iron and vitamins are needed to make more red blood cells. The lack of counseling carried out by health workers about the importance of consuming blood-added tablets has an impact on the high incidence of anemia in pregnant women. It is important for officers to play an active role in increasing the provision of education to pregnant women so that they carry out regular prenatal check-ups and conduct sweeping through home visits to pregnant women who do not do regular prenatal check-ups. One of the cares carried out during pregnancy check-ups is to check Hb levels to find out whether pregnant women experience anemia during pregnancy, so that if it is known that pregnant women have anemia during pregnancy, it is hoped that mothers will receive appropriate intervention and treatment early.

CONCLUSION

There is a significant relationship between maternal height with stunting toddler. There is a significant relationship between a history of anemia in pregnant women with the stunting toddler. There is no significant relationship between birth weight and the stunting toddler. The most dominant variable affecting the incidence of stunting is anemia.

SUGGESTION

Increase education about the importance of consuming nutritious food and take blood boosting tablets to prevent anemia in pregnancy which can have an impact on stunting in children. Monitoring pregnant women take blood boosting tablets by using checklist monitoring form. Share flyer about the

importance consuming food with balance nutrition, importance take blood boosting tablets and how to prevent stunting in children for the community (pregnant women) consuming Fe tablets given by health officers, as well as increasing the intake of nutritious food to avoid anemia which is one of the factors causing stunting in toddlers. For other Researchers need to be able to continue the research by exploring more variables related to stunting by using better methods such as cohorts.

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