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The Relationship Between Pregnant Women's Participation in Pregnant Women's Classes and Integrated ANC (Ante Natal Care) With the Incidence of Stunting in Toddlers in The Work Area of Pesantren I Public Health Center Kediri City

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ABSTRACT
Stunting is a problem that still exists in Indonesia which is characterized by poor linear growth conditions of toddlers caused by many factors. The purpose of this study was to determine the relationship between Pregnant Women's Classes and Integrated ANC with the Incident of Stunting in Toddlers. The design of this study was observational with a cross-sectional approach. The population of this study was all toddlers totaling 1296 toddlers with a sample of 306 toddlers taken using the proportional random sampling technique. The Chi Square statistical test was used to see the relationship between variables. Based on the results of the study, it was found that most mothers attended Pregnant Women's Classes at the Health Center (81.7%) and actively attended ANC (95.4%). The results of data analysis showed that there was a strong relationship between Pregnant Women's Classes and the incident of stunting. The implementation of Pregnancy Classes and integrated ANC activities for Pregnant Women need to be improved in order to prevent stunting.

Keywords : ANC, Pregnant Women's Classes, Stunting

INTRODUCTION
Stunting is a problem currently being faced in Indonesia. Toddlers with stunting problems show poor linear growth. This is because toddlerhood is the golden period in growth and development. Stunting is a form of malnutrition characterized by a height for age (TB/U) of <-2 Standard Deviations (SD) based on anthropometric measurements.

The prevalence of stunting globally according to WHO (2017) states that in 2016 there were 155 million children under the age of five with a percentage of 23.8% experiencing stunting. The prevalence of stunting in toddlers becomes a health problem in society if the prevalence is 20% or more.

In Indonesia, according to the results of the Indonesian Health Survey (SKI) (2023), the stunting rate is 21.5% of toddlers. The prevalence of stunting in East Java in 2023 was 17.7%. Meanwhile, Kediri City was 18.6%, an increase compared to SSGI data from 2022 of 14.3%. In addition, the prevalence of stunting in Kediri City is greater than in East Java. Based on the results of the E-PPGBM (Electronic Community-Based Nutrition Recording and Reporting) Report in 2023, the work area of the Pesantren 1 Health Center was ranked first for the highest prevalence of stunting in Kediri City, which was 13.3%, with 21 toddlers with very short criteria and 118 toddlers with short criteria. The prevalence above shows that stunting in East Java is still high, and is a health problem that must be addressed quickly.

Preventive efforts to deal with stunting have been carried out by the Indonesian Ministry of Health, namely in the form of specific nutritional interventions with the main target of 1000 HPK by empowering integrated health posts which are also one of the intervention

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programs in the fields of Education and Health. One of the actions that can be taken as assistance for families at risk of stunting is to monitor a woman's pregnancy as a preventive effort against stunting in newborns. Pregnant women can be monitored and their health monitored during pregnancy can be done through ANC (Ante Natal Care) services. Integrated ANC aims to prepare prospective mothers to be truly ready to get pregnant, give birth and ensure that the surrounding environment can protect babies from infection. Doctors and midwives are able to carry out quality ANC (Ante Natal Care) and carry out early detection (screening), establish diagnoses, carry out management and referrals so that they can contribute to efforts to reduce maternal and neonatal mortality.

In addition, one way that can be done as an effort to prevent stunting is to create a forum where information related to nutrition and health around pregnancy can be socialized massively, which is usually known as the Pregnant Women's class. The content in this Pregnant Women's class can be in the form of materials related to pregnancy care, including the importance of fulfilling nutrition during pregnancy which is one of the important requirements in efforts to prevent stunting (Ministry of Health of the Republic of Indonesia, 2021).

Based on the description above, the researcher wants to know more about the Relationship between Pregnant Women's Participation in Pregnant Women's Classes and Integrated ANC (Ante Natal Care) with the Incidence of Toddler Stunting. For this reason, the researcher took the title "The Relationship between Pregnant Women's Participation in Pregnant Women's Classes and Integrated ANC (Ante Natal Care) with the Incidence of Toddler Stunting in the Work Area of Pesantren I Health Center, Kediri City".

METHODS

The research design used was an observational study with a case-control approach (retrospective). The population of this study was all toddlers at the Pesantren I Health Center in Kediri City, totaling 1296 toddlers. The number of samples in this study was 306 toddlers taken using the proportional random sampling technique. This study explored the independent variables, namely the participation of pregnant women in the Integrated Pregnant Women's Class and ANC (Ante Natal Care) and the dependent variable was the incidence of stunting. The data collection method used secondary data from health center data and KMS (Healthy Card) books. The analysis used was the Spearman Chi Square Correlation to determine the relationship between Pregnant Women's Participation in the Integrated Pregnant Women's Class and ANC (Ante Natal Care) with the incidence of Stunting in Toddlers in the Work Area of the Pesantren I Health Center UPTD in Kediri City.

RESULTS

A. Variable Characteristics

The characteristics of the subjects in this study include gender toddlers, maternal age, and maternal education in stunted toddlers. The description of the characteristics of the subjects is as in Table 1.

Table 1. Characteristics of Research Subjects Based on Toddler Gender, Mother's Age, and Mother's Education in Stunting Toddlers

Characteristics	Normal		Short		Very Short	
	F	%	F	%	F	%
Toddler gender						
Woman	158	84.9	20	10.8	3	4.3
Man	89	82.4	9	17.6	7	0

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Mother's Age						
20 - 25 years	41	87.2	4	8.5	2	4.3
26 - 30 years	88	84.6	13	12.5	3	2.9
31- 35 years old	120	82.2	23	15.8	3	2.1
36 - 40 years	7	77.8	2	22.2	0	0
Mother's Education						
High School	231	84	36	13.1	8	2.9
D1	2	100	0	0	0	0
D3	9	69.2	4	30.8	0	0
S1	14	87.5	2	12.5	0	0

Source: Data Analysis Results

Based on Table 1, it shows that a small portion of subjects experiencing stunting are male, the mother's age range is between 31-35 years, with the mother's education being high school.

B. Univariate Test

After data collection, coding, editing, tabulating, and analysis of research data were carried out. The results of univariate analysis can be seen in Table 2.

Table 2 Analysis Results The Relationship Between Pregnant Women's Participation in Pregnant Women's Classes and Integrated ANC (Ante Natal Care) with the Incidence of Toddler Stunting in the Work Area of Pesantren 1 Health Center, Kediri City

Variables	Mark	Correlation coefficient
Pregnant Women's Participation in Pregnant Women's Classes	0.001	-0.519
Participation of Pregnant Women in Integrated ANC	0.001	-0.439

Source: Data Analysis Results

Based on the results of data analysis using the Chi Square Spearman Correlation statistical test with a degree of error of 0.05, it was found that the independent variable that is suspected to be most related to the incidence of stunting in toddlers is the Participation of Pregnant Women with a p-value of 0.001. The largest Correlation Coefficient value obtained was -0.519, meaning that the Participation of Pregnant Women in Pregnant Women's Classes has a greater power against the incidence of stunting in toddlers with an inversely proportional relationship. If the participation of Pregnant Women in pregnant women's classes is more active, the incidence of stunting in toddlers will be lower.

DISCUSSION

Stunting is a chronic malnutrition problem caused by insufficient nutritional intake for a long time due to the provision of food that does not meet nutritional needs, stunting can occur from when the fetus is still in the womb and only appears when the child is two years old. 5 From the results of research at the Pesantren 1 Health Center, Kediri City, the participation of pregnant women in the Pregnant Women class was mostly active, namely 250 people (81.7%). In pregnant women who are active in the Pregnant Women class, the number of toddlers with short and very short nutritional status (stunting) is 18 toddlers (7.2%). For toddlers with short nutritional status, most of their mothers during pregnancy were less active in attending the Bumil class, namely 6 people (66.7%) and almost half were inactive, namely 19 people

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(40.4%). While for the nutritional status of very short toddlers, only a small part is short, namely 1 person (11.1%). From the results of research data at the Pesantren I Health Center, it was found that the more active pregnant women are in attending the Bumil class, the lower the incidence of stunting in toddlers.

Participation of Pregnant Women in Integrated ANC, most of them are active, namely 292 people (95.4%). In Pregnant Women who are active in Integrated ANC, the number of toddlers with short and very short nutritional status (stunting) is 38 toddlers (13%). The number of toddlers whose mothers are not active in coming to integrated ANC who experience stunting is 7 toddlers (87.5%). The number of toddlers whose mothers are not active in coming to integrated ANC who experience stunting is 5 toddlers (85.4%). This shows that in the Pesantren Health Center 1 toddler whose mother actively came to do integrated ANC during pregnancy has a lower risk of having a toddler who experiences stunting compared to those who are not active and less active.

The factors causing stunting are closely related to the underlying conditions of the incident, the conditions that influence stunting are, local political and economic conditions, education status, community culture, agricultural and food systems, water conditions (sanitation), and the environment. Maternal factors can be due to poor nutrition during preconception, pregnancy, and lactation. In addition, it is also influenced by the mother's short stature, infection, early pregnancy, mental health, IUGR and premature birth, close birth spacing, and hypertension. The home environment can be caused by inadequate stimulation and activity, poor care implementation, food discomfort, inappropriate food allocation, and low education of caregivers. Poor food quality includes poor micronutrient quality, lack of diversity and food intake from animal sources, non-nutritious content, and low energy content in complementary foods. Inadequate feeding practices include infrequent feeding, inadequate feeding during and after illness, food consistency that is too light, insufficient food quantity, unresponsive feeding. Evidence of greater dietary diversity and consumption of foods from animal sources is associated with improved linear growth. Recent analysis suggests that households that adopt a diverse diet, including a diet enriched with complementary nutrients, will increase nutrient intake and reduce the risk of stunting.

In addition, one way that can be done as an effort to prevent stunting is to create a forum where information related to nutrition and health around pregnancy can be socialized massively, which is usually known as the Pregnant Women's class. The implementation of the Pregnant Women's class as an effort to prevent stunting has benefits and also influences the attitudes and knowledge of Pregnant Women towards preventing stunting. The content in this Pregnant Women's class can be in the form of materials related to pregnancy care, including the importance of fulfilling nutrition during pregnancy which is one of the important requirements in efforts to prevent stunting.

The purpose of this study was to determine the relationship between the participation of pregnant women in the Pregnant Women's Class and Integrated ANC (Ante Natal Care) with the incidence of stunting in toddlers.

From the results of the Spearman Correlation Chi Square statistical test with an error degree of 0.05, the p-value was obtained less than the significance of 0.0001, indicating that there is a significant relationship between the independent variables, namely the Participation of Pregnant Women in the Pregnant Women's Class and Integrated ANC, and the dependent variable, namely the incidence of stunting in toddlers. The results of the independent variable that is suspected to have the strongest relationship with the incidence of stunting in toddlers are the Participation of Pregnant Women, the largest Correlation Coefficient value obtained is -0.519, meaning that the Participation of Pregnant Women in the Pregnant Women's Class has a greater power against the incidence of stunting in toddlers with an inversely proportional relationship. If the participation of Pregnant Women in the Pregnant Women's Class is more

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active, the incidence of stunting in toddlers will be lower.

This study is in line with the research of Kusumadewi, et al. (2024) which found that the Pregnant Women's class played an active role and had an influence in efforts to prevent stunting because the increased knowledge of Pregnant Women after attending the class made mothers able to apply the health education provided properly.

CONCLUSION

There is a significant relationship between the participation of pregnant women in pregnancy classes at the Pesantren 1 Health Center, Kediri City. There is a significant relationship between the participation of pregnant women in integrated ANC (Ante Natal Care) at the Pesantren 1 Health Center, Kediri City. The results of the Spearman Correlation analysis of the incidence of Stunting in toddlers showed that from the independent variables, namely the Participation of Pregnant Women in Pregnant Women's Classes, the strongest correlation was with the incidence of stunting at the Pesantren 1 Health Center, Kediri City.

REFERENCE

Handayani, T. Y., Sari, D. P., & Margiyanti, N. J. (2021). Peningkatan Pengetahuan Ibu Hamil Melalaui Kelas Ibu Hamil. Jurnal Inovasi Dan Terapan Pengabdian Masyarakat, 1(2), 72–76.

Kemenkes BKPK. Survei Kesehatan Indonesia (SKI) 2023 Dalam Angka. Kementrian Kesehatan Badan Kebijakan Pembangunan Kesehatan; 2023.

Kemenkes RI] Kementerian Kesehatan RI. 2021. Buku Saku Hasil Studi Status Gizi Indonesia (SSGI) Tingkat Nasional, Provinsi, dan Kabupaten/Kota Tahun 2021. Kemenkes RI, Jakarta.

Kemenkes RI] Kementerian Kesehatan RI. 2021. Buku Saku Hasil Studi Status Gizi Indonesia (SSGI) Tingkat Nasional, Provinsi, dan Kabupaten/Kota Tahun 2021. Kemenkes RI, Jakarta.

Ramirez, N.H, Gamboa, L.F., Bedi, A.S, and Sparrow, R. Child Malnutrition and Antenatal Care: Evidence from three Latin American countries. ISS 2012; 536.

Soetjiningsih dan Ign. N. Gede Ranuh. 2015 Tumbuh Kembang Anak. Edisi 2. Jakarta: Buku Kedokteran EGC. 2. Kementrian Kesehatan RI. 5 halaman

WHO. World Health Statistics 2017 : Monitoring Health for the SDGs, Sustainable Development Goals. (2017).

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