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EXCLUSIVE BREASTFEEDING AND COMPLEMENTARY FEEDING IN RELATION TO TODDLER STUNTING: A SUKARAMI VILLAGE STUDY, PEMULUTAN DISTRICT

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ABSTRACT

Indonesia is a country with the fifth largest prevalence of stunting in the world, the prevalence of children under five stunting in 2022 is at 21.6%, exceeding the standard of the World Health Organization (WHO) is less than 20%. Prevention Stunting This can be done by giving exclusive breastfeeding. Children who are not given exclusive breastfeeding will have twice the risk of suffering from stunting. MPASI can be given as soon as the baby is four months old by looking at the baby's motor readiness to accept solid food that is prepared, served and given cleanly and in accordance with the baby's nutritional intake needs. This study aims to determine the relationship between exclusive breastfeeding and complementary feeding with stunting in Sukarami Village, Pemulutan District, Ogan Ilir Regency. This research includes quantitative research by cross-sectional design. This research was conducted in Sukarami Village on 23 May-23 June 2023, using interviews and observation methods. The population in this study were all mothers in Sukarami Village who had children aged 0-59 months, using a sample of 40 mothers. Samples were taken using the purposive sampling technique. The analysis used was univariate and bivariate analysis with a significance level of 95. Based on the results of the analysis, it was known from the 40 respondents that 27 toddlers (32.5%) received exclusive breastfeeding and 13 other toddlers (67.3%) did not get exclusive breastfeeding. In addition, as many as 28 toddlers (70%) got weaning food (MPASI) on time and 12 other toddlers (30%) did not get it on time. 27 respondents gave exclusive breastfeeding, 10 of them stunting, 13 respondents who did not give exclusive breastfeeding 4 of them were stunting. Then, 23 respondents gave weaning food on time, 11 of them were stunted, while 12 respondents gave weaning food not on time, 3 of them were stunted. Based on the Fisher Excat test results, the markp-value for exclusive breastfeeding = 1.000 (p-value> 0.05). There is no significant relationship between exclusive breastfeeding and the incidence of stunting in toddlers aged 0-59 months in Sukarami Village, Pemulutan District, Ogan Ilir Regency. Then ratep-value for the provision of weaning food = 0.484 (p-value> 0.05). There is no significant relationship between the provision of complementary foods and the incidence of stunting in toddlers aged 0-59 months in Sukarami Village, Pemulutan District, Ogan Ilir Regency.

Keywords: Exclusive breastfeeding, weaning food, Stunting

Introduction

Adequate nutrition and food is one of the important factors in supporting the quality of human life which is a benchmark in the success of the development of a nation. Nutrition has a big influence in increasing human intelligence and productivity. Indonesia is one of the countries that still has nutritional problems which have an impact on the quality of human resources in Indonesia. The nutritional problem that currently continues to be a concern is stunting.[1]

As quoted from the book National Strategy for the Acceleration of Prevention of Stunting for the 2018-2024 Period published by the Secretariat of the Vice President of the Republic of

Indonesia and the Coordinating Ministry for Human Development and Culture, it is stated that Stunting or often called stunting or stunting is a condition of failure to grow in children under five. Due to chronic malnutrition and recurrent infections, especially during the 1,000 HPK period, i.e. from fetus to 23 months old child. In the book it is also stated that a child is classified as Stunting if his body length/height is below minus 2 (two) standard deviations of the length or height of a child his age[2]. Indonesia is a country with the fifth largest prevalence of stunting in the world. Based on data from the Study on the Nutritional Status of Toddlers in Indonesia (SSGBI), shows that the prevalence of stunting under five in 2022 is at 21.6%, a decrease compared to the 2021 SSGBI data of 24.4%, which is a decrease of 2.8%. However, the prevalence of stunting is still high when compared to the World Health Organization (WHO) standard, which is less than 20%[3]. Based on this data, it can be interpreted that out of 10 toddlers in Indonesia, 2 of them are stunted.

The prevalence of stunting under five in South Sumatra Province based on SSGBI 2022 data is at 18.6%. For Ogan Ilir Regency, the prevalence of stunting in toddlers has a prevalence rate above the national average, which is 24.9% based on SSGBI data for 2022 [4]. Ogan Ilir Regency is the second highest district in the Stunting Study in South Sumatra Province.

*Stunt*ing a complex health problem caused by several factors, namely direct and indirect factors. Factors that directly cause stunting are nutritional intake and the presence of infectious diseases. Indirect factors are family food security, parenting style and family diet as well as environmental health and health services [5].

Prevention of stunting can be done by giving exclusive breastfeeding. Breast milk is a water produced by the mother which has various kinds of substances needed by the baby in growth needs and baby development. Meanwhile, exclusive breastfeeding is pure breast milk that is given to babies without the addition of other liquids such as formula milk, honey and orange juice [6].

Sufficient breastfeeding is related to the child's growth period. The longer a child is given breast milk, the more it will affect the child's growth in length, both in the second and third year of life. Children who are not given exclusive breast milk will have twice the risk of suffering from stunting. In general, exclusive breast milk is given until the baby is six months old, but if the breast milk produced by the mother is not sufficient for the baby's growth needs. So complementary breast milk (weaning food) can be given as soon as the baby is four months old by looking at the baby's oromotor readiness in accepting solid food. weaning foodis prepared, served and given cleanly and in accordance with the baby's nutritional intake needs [7].Based on these problems, the authors need to conduct research with the title "The Relationship between Exclusive Breastfeeding and MP-ASI with Stunting in Toddlers Aged 0-59 Months in X Village, Ogan Ilir District".

Method

This research uses quantitative methods with a cross-sectional design. Dependent and independent variable data are collected at one time. The dependent variable used in this study was the incidence of stunting in children aged 0-59 months in Sukarami Village, Pemulutan District, Ogan Ilir District and the independent variables were exclusive breastfeeding and complementary feeding. Data collection was carried out on 23 May-23 June 2023 through interviews and observations. The population in this study were all mothers who had children aged 0-59 months in Sukarami Village, Pemulutan District, Ogan Ilir Regency. The sample from this study was 40 mothers who had children aged 0-59 months. Sample collection used purposive sampling technique.

The data that has been collected will then be analyzed using univariate analysis. Univariate analysis was carried out to determine the frequency distribution of each variable being studied. Then, data analysis was carried out using bivariate analysis in the form of the Fisher Exact test with a significance level of 95%. The Fisher Excat test was used to determine the relationship between exclusive breastfeeding and weaning foodand the incidence of stunting in Sukaramai Village, Ogan Ilir Regency. The data in this research is presented in the form of an open table which is then interpreted, discussed and concluded to answer the research formulation.

Results

The characteristics of respondents in Sukarami Village, Pemulutan district, Ogan Ilir Regency showed in Table 1 below.

Table 1. Respondents' characteristics

Characteristics	n	%
Age (year)		
17-25	9	22,5
26-35	22	55
36-45	8	20
46-55	1	2,5
Education		
Elementary	14	35
Junior high school	15	37,5
Senior high school	9	22,5
College	2	5
Job type		
Housewife	22	55
Farm labourer	1	2,5
Trader	4	10
Midwife	1	2,5
Weaving	9	22,5
Tailor	2	5
Repairman	1	2,5

The distribution of the frequency of stunting incidents based on Height for Age(TB/U), exclusive breastfeeding and weaning food is presented in Table 2.

Table 2. Frequency Distribution of Stunting, Exclusive Breastfeeding and Complementary Feeding

Variables	n	%
Stunting status		
Stunting	14	35
Not Stunting	26	65
Exclusive breastfeeding		
Yes	27	67.5
No	13	32.5
Providing weaning food		
On time	28	70
Not on time	12	30

Based on Table 1, it can be seen that of the 40 respondents in Sukarami Village, Pemulutan District, Ogan Ilir Regency, 14 of them (35%) were stunted and 26 others (65%) were not stunted. Most of the toddlers, namely 27 toddlers (32.5%) received exclusive breastfeeding and 13 other toddlers (67.3%) did not get exclusive breastfeeding. In addition, as many as 28 toddlers (70%) got weaning foodon time and 12 other toddlers (30%) did not get it on time.

The Relationship between Exclusive Breastfeeding and Stunting Incidents in Sukarami Village, Pemulutan District, Ogan Ilir Regency

Table 2 shows that of the 27 toddlers who received exclusive breastfeeding, 10 of them experienced stunting and 17 others were not stunted. Meanwhile, of the 13 toddlers who were not exclusively breastfed, there were 4 toddlers who were stunted and 9 others who were not stunted. Based on the results of bivariate analysis using the Fisher Exact test, a p-value = 1.000 was obtained, which is greater than 0.05 (p-value >0.05), which means that there is no significant relationship between exclusive breastfeeding and the incidence of stunting in toddlers aged 0-59 months in X Village, Ogan Ilir District.

Table 3. Relationship between exclusive breastfeeding and complementary feeding with stunting in toddlers aged 0-59 months in Sukarami Village, Pemulutan District

	Stunting		OR (95% CI)	P-Value
	Yes (n, %)	No (n,%)		
Exclusive breastfeeding				
Yes	10 (37.1)	17 (62.9)	0.756 (0.184-3.105)	1,000
No	4 (30.8)	9 (69.2)		
Providing weaning food				
On time	11 (39.3)	17 (60.7)	0.515 (0.114-2.334)	0.484
Not on time	3 (25)	9 (75)		

The Relationship between Giving Weaning food and Stunting Incidents in X Village, Ogan Ilir Regency

Based on Table 2, it can be seen that of the 28 toddlers who received weaning food on time, 11 of them were stunted and the other 17 were not stunted. Meanwhile, of the 12 toddlers who did not receive weaning food on time, there were 3 toddlers who were stunted and 9 who were not stunted.

From the results of bivariate analysis using the Fisher Exact test, p-value = 0.484, where this value is greater than 0.05 (p-value> 0.05). This means that there is no significant relationship between giving weaning foodwith the incidence of stunting in toddlers aged 0-59 months in Village

Discussion

The Relationship between Exclusive Breastfeeding and Stunting Incidents in Sukarami Village, Pemulutan District, Ogan Ilir Regency

Ogan Ilir is one of the districts in South Sumatra Province which is a priority focus location for stunting. The prevalence of stunting under five in Ogan Ilir Regency reaches 43.9%, and is spread across various sub-districts in Ogan Ilir Regency [8]. As per the World Health Organization (WHO), when the prevalence of stunting exceeds 40%, the region is classified as experiencing severe malnutrition[9].Based on research results, among toddlers who get exclusive breastfeeding 37.1% of them experience stunting. This shows that there is no relationship between exclusive breastfeeding and the incidence of stunting in Village Not only that, research by Nova and Afriyanti (2018) also states that exclusive breastfeeding does not have a significant relationship with the incidence of stunting in toddlers (p-value=0.327)[7].

These results are not in line with previous research which stated that a history of exclusive breastfeeding was significantly related to the incidence of stunting in toddlers. In this study, it was explained that toddlers who were exclusively breastfed were 9.3 times less likely to experience stunting than toddlers who were not exclusively breastfed[10]. Research by Komalasari et al., (2020)also states that toddlers who are not exclusively breastfed have a 11,111 times higher risk of experiencing stunting compared to toddlers who are exclusively breastfed. This can be caused by the nutritional content of breast milk. So if children do not get these nutrients exclusively, it can trigger stunting.

Exclusive breastfeeding is breast milk given to babies from birth for 6 months without adding and/or replacing it with other foods or drinks [12]. According to the Indonesian Ministry of Health, (2022), breast milk given exclusively during the first 6 months of life can meet the baby's nutritional needs for growth and development[4].

Toddlers who are not exclusively breastfed show that they have received other foods besides breast milk before they are exactly 6 months old[13]. Based on the results of interviews with respondents, it can be seen that toddlers who are not exclusively breastfed until they are 6 months old in Sukarami Village, Pemulutan District are caused by several factors, such as problems with the nipples (breasts), no milk coming out and children refusing to be breastfed.A mother's lack of diverse food consumption during breastfeeding can also cause the mother to be malnourished during breastfeeding, resulting in stunted children[14].

Lower maternal education levels are often linked to a reduced understanding of parenting practices, including exclusive breastfeeding[15]. Improved maternal knowledge is expected to enhance toddlers' nutritional status[16].

The Relationship between Giving Weaning Foodand Stunting Incidents in X Village, Ogan Ilir Regency

Based on research results, 39.3% of toddlers who get weaning food on time experience stunting. Furthermore, this study also showed that there was no relationship between the provision of complementary foods on time and the incidence of stunting in Sukarami Village, Pemulutan District. This research is in line with research conducted by Amalia et al., (2022) which stated that there was no relationship between the provision of complementary foods and the incidence of stunting (p-value = 0.102). In addition, research by Noviandri et al., (2022), also stated that the age at which complementary foods were first given was not related to the incidence of stunting (p-value = 0.267). This is because the fulfillment of toddler nutrition is not only influenced by the time of giving complementary foods, but can also be influenced by the quality, quantity, hygiene and method of giving complementary foods.

Contrary to previous research, where in the study it was stated that there was a significant relationship between the history of giving weaning food and the incidence of stunting, where toddlers who were given weaning food did not match their age had a 3.917 times chance of experiencing stunting compared to with toddlers who are given solids according to their age.[19]

Weaning food is food or drink that contains nutrients. Which is given to babies or children aged 6 to 24 months to meet nutritional needs other than breast milk[20]. According to WHO, MPASI should be given after children are 6 months old. This is because at that age the baby's nutritional needs begin to exceed those provided by breast milk. If you don't give it at the right time to eat, it will impact the baby's growth.

Giving complementary foods at too early an age (<6 months) can increase the risk of infectious diseases such as diarrhea. This is because solid food given to children is not as clean and easy to digest as breast milk. According to previous research, giving early weaning foodcan increase the risk of stunting in children by 3.7 times. This is due to the small digestibility of food

and insufficient nutritional content due to disruption of exclusive breastfeeding consumption, so that toddlers who are given complementary foods at too early an age will be more susceptible to stunting.[21]

Even when introduced at the appropriate time, complementary foods should be nutritionally balanced with a wide array of food sources.Stunted toddlers typically exhibit a less diverse nutritional intake in contrast to their counterparts with normal nutritional status.[22]The mother's responsibility in orchestrating the household menu plays a pivotal role in achieving this diversity, as a deficiency in dietary variety may lead to malnutrition and an increased susceptibility to stunting.[14,23,24] Regrettably, economic factors and the dietary preferences of family members frequently impede the diversification of family food consumption.

Apart from giving weaning food too early, giving weaning food too late can also have a bad impact on toddlers. Delays in providing weaning food can cause delays in the growth and development of toddlers because the toddler's nutritional needs are not met. Not only that, giving weaning food too late can also cause the child's introduction to food to be delayed as a result of which the child can experience eating disorders such as refusing solid food, choking, and even vomiting due to the child's lack of eating skills.[18]

Conclusion

The proportion of stunting in Sukarami Village, Pemulutan District, Ogan Ilir Regency reached 35%. There is no relationship between exclusive breastfeeding and timely complementary feeding with the incidence of stunting in Sukarami Village, Pemulutan District, Ogan Ilir Regency. The local government is expected to make efforts to increase and provide nutritional support resources for toddlers through cross-sectoral collaboration so that the implementation runs effectively and efficiently.

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Conflict of Interest

No conflicts of interest.

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