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Risk factors for stunting incidents and positive deviance behavior of mothers towards toddlers in the stunting locus village

Faktor resiko kejadian stunting dan perilaku positive deviance ibu terhadap balita di desa lokus stunting

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Abstract

Stunting is a growth disorder during infancy that is caused by prolonged malnutrition. The research aims to analyze risk factors for stunting in toddlers and identify positive deviance behaviors of mothers in stunting locus villages. Research using a cross-sectional design was carried out in Tompo Village, Barru Regency in September-November 2023 with a sample size of 83 toddlers and 8 mother informants. Data collection was done through interviews and Focus Group Discussion. Statistical analysis includes Chi-Square, Mann-Whitney Test and logistic regression with 95% Cl. Analysis of positive deviance behavior data using data reduction, data display, conclusion drawing and presented in narrative. The results of the study showed that there were 3 variables that were risk factors for stunting, namely maternal height during pregnancy <150 cm (p=0,007;OR=5,294), mothers with less nutritional knowledge (p=0,009;OR=8,267) and not receiving exclusive breastfeeding (p=0,027;OR =4,797). The conclusion of this study is that the mother's height during pregnancy, nutritional knowledge, and exclusive breastfeeding are risk factors for stunting. The positive deviance behaviors of mothers found were carrying out early initiation of breastfeeding, exclusive breastfeeding, providing complementary foods and early introduction of animal protein according to WHO recommendations and prioritizing children in food distribution.

Keywords: Exclusive breastfeeding, mother's height, nutritional knowledge, pregnancy

Abstrak

Stunting merupakan gangguan pertumbuhan pada masa balita yang di akibatkan malnutrisi berkepanjangan. Penelitian bertujuan untuk menganalisis faktor resiko stunting pada balita dan mengidentifikasi perilaku positive deviance ibu di desa lokus stunting. Penelitian menggunakan desain cross-sectional dilakukan di Desa Tompo Kabupaten Barru pada bulan September-November 2023 dengan jumlah sampel 83 balita dan 8 informan ibu. Pengambilan data melalui wawancara dan Focus Group Dicussion. Analisis statistik meliputi Chi-Square, Uji Mann-Whitney dan regresi logistic dengan 95% Cl. Analisis data perilaku positive deviance menggunakan data reduction, data display, conclusion drawing dan disajikan dalam naratif. Hasil penelitian menunjukkan terdapat 3 variabel yang menjadi faktor resiko stunting yaitu tinggi badan ibu saat hamil <150 cm (p=0,007; OR=5,294), ibu dengan pengetahuan gizi kurang (p=0,009;OR=8,267) dan tidak mendapat ASI eksklusif (p=0,027;OR =4,797). Kesimpulan penelitian ini tinggi badan ibu saat hamil, pengetahuan gizi, ASI eksklusif merupakan

faktor resiko stunting. Perilaku positive deviance ibu yang ditemukan yaitu melakukan IMD, ASI eksklusif, memberikan MP-ASI dan pengenalan protein hewani lebih awal sesuai rekomendasi WHO serta memprioritaskan anak dalam pembagian makan.

Kata Kunci: ASI eksklusif, ibu hamil, pengetahuan gizi, tinggi badan,

Introduction

The problem of malnutrition in several developing countries, such as underweight, stunting, wasting and micronutrient deficiencies, is often a concern (Wardita et al., 2021). Stunting is a condition of impaired growth during infancy which is caused by prolonged malnutrition, especially during the first 1000 days of life (Aritonang et al., 2020).

The proportion of children under five in the world who experience stunting is 22% or around 151 million children under five and half come from Asia (Titaley et al., 2019). The prevalence of stunted toddlers in Southeast Asia reaches 27,4% and Indonesia is the third highest country with stunting prevalence. The prevalence of stunted toddlers in Indonesia based on data from the 2023 Indonesian Health Survey (IHS) is 21,6%. The results of the Indonesian Nutritional Status Survey show that the prevalence of stunting in Indonesia in 2021 was 24,4%, and will decrease by 2,8% in 2022 to 21,6%. The prevalence of stunting is based on data, the average decline in stunting prevalence from 2018-2022 is only around 2,3% per year. The prevalence of stunting for South Sulawesi Province has decreased from 35,6% in 2018 to 27,4% in 2023 (Kemenkes RI, 2023). Even though the prevalence of stunting in toddlers has decreased, according to WHO (World Health Organization), a country with a stunting prevalence of between 20-30%, Indonesia is still a country with a high prevalence of stunting (Maria et al., 2020).

Stunting is a problem of chronic malnutrition with multifactorial causes and occurs over a long period of time. Factors causing stunting can be directly influenced by infectious diseases and lack of nutritional intake in terms of quality and quantity(UNICEF, 2015), while indirect factors include low access to food, mothers with poor parenting styles, inadequate health services and an unhealthy environment (Sarma et al., 2017). In line with research conducted by Wardita et al. (2021) found that the mother's pregnancy history, child's nutritional status, parenting style, mother's knowledge and exclusive breastfeeding had a significant effect on the incidence of stunting in Saronggi District, Sumenep Regency. In line with research conducted by Windasari et al. (2020) at the Tamalate Public Health Center, Makassar City, they found that there was a significant relationship between Initiation of Breastfeeding and exclusive breastfeeding and the incidence of stunting in toddlers.

The urgency of the stunting problem is also influenced by the consequences caused by stunting, namely increased morbidity and mortality, poor child development, learning capacity, increased risk of infection and non-communicable diseases in adulthood, as well as reduced productivity and the economy (Beal *et al.* 2018).

The still high problem of stunting in Indonesia shows that problems are related, one of which is poverty (Aramico *et al*. 2016). Nationally, the poverty rate in Indonesia tends to decrease, until in 2021 it is 9,71% and the poor population, especially in South Sulawesi Province, is 8,53% (BPS, 2022). Research from Bukusuba et al. (2017) in Uganda explained that the main cause of stunting in children aged 6-59 months is low access to food consumption. Stunted children tend not to consume a variety of foods in amounts that do not reach the child's minimum adequacy level.

Barru Regency is included in the priority City/Regency locus for interventions to reduce stunting in South Sulawesi Province with a stunting prevalence of 22,41% referring to the 2023 Indonesian Health Survey (Kemenkes RI 2023), Apart from that, the presence of poor families is quite high in Barru Regency at 8,68% (BPS 2020). Factors causing stunting in Barru Regency based on research Fadillah et al. (2022) in the Pekkae Public Health Center UPT work area, namely the history of giving Weaning Food, infectious diseases, maternal nutritional knowledge, maternal education and family economic factors. Addressing the problem of

stunting in Indonesia has been regulated in Presidential Regulation of the Republic of Indonesia Number 72 of 2021, namely the Acceleration of Reducing Stunting. However, Indonesia still has a fairly high prevalence of toddler stunting. However, in certain cases, there is a group of people who are a form of Positive Deviance (PD) which is successfully applied by mothers of toddlers in the care and upbringing of children.

Positive deviance can be used to explain the factors that influence the growth and good nutritional status of children in poor environments. Positive deviance analysis allows stakeholders to identify adaptive behavior that is successful in improving children's nutritional status (World Bank Group 2018). Apart from that, it provides direction in designing a nutrition-sensitive program among the community to overcome nutritional problems (Saaka & Mutaru 2014). Based on this, the aim of this research is to analyze risk factors for stunting and identify positive deviance behavior of mothers among toddlers.

Methods

Research with a cross-sectional design was conducted in Tompo Village, Barru District, Barru Regency, South Sulawesi Province in September – November 2023, which is the stunting locus village with the highest stunting prevalence in Barru Regency, namely 22,5% based on the results of e-aplication weighing data (Recording and Community Based Nutrition Reporting) August 2021.

The population in this study was all 113 toddlers aged 24–59 months. Based on the calculation results, the sample for this study was 83 toddlers using simple random sampling. The inclusion criteria were toddlers aged between 24-59 months, male and female, the child was not under medical treatment at the time of the research, lived with parents/guardians, the family was willing to take part in research activities, and had a Maternal and Child Health book. Exclusion criteria are toddlers who have congenital abnormalities or birth defects.

The data collected consisted of toddler characteristics (gender and age of the toddler), maternal characteristics (knowledge of nutrition, maternal height during pregnancy, and history of Antenatal Care/ ANC visits), food expenditure and parenting patterns (exclusive breastfeeding, feeding practices and food diversity) as well as positive deviance behavior of mothers. Data collection through interviews with questionnaires. Data on maternal positive deviance behavior was obtained through Focus Group Discussion (FGD) using an FGD interview guide.

Toddler height data was obtained from measurements using a stadiometer with an accuracy of 0,1 cm. Nutritional status data uses the WHO Antro 2005 application, nutritional status uses the Height index with categories referring to Minister of Health Regulation Number 2 of 2020 concerning Child Anthropometric Standards. ANC visit history data is categorized into 1-3 times ANC and ≥4 times ANC (Titaley et al. 2019) and data on maternal height during pregnancy is categorized as <150 cm and ≥150cm (Manggala et al. 2018). Maternal nutritional knowledge is categorized as poor if the value is <60% and good if the value is ≥60% (Khomsan 2004) and feeding practices are categorized as poor if <80% and good if ≥80% (Masithah *et al*. 2005).

Collecting consumption data to determine the diversity of toddler food consumption uses 1x24 hour food recall and the IDDS (Individual Dietary Diversity Score) questionnaire which consists of 9 food groups, namely: 1) starchy foods, 2) green vegetables, 3) fruit and vegetables sources of vitamin A, 4) other fruit and vegetables, 5) organ meat (offal), 6) meat and fish, 7) eggs, 8) legumes, nuts and seeds, 9) milk and dairy products (Kennedy et al 2011). If the score is 0-4 then the food is categorized as not diverse, but if the score is >4 then it is said to be diverse (Widyaningsih *et al*. 2018). Food expenditure data is categorized as high if food expenditure is ≥60% and low category if <60% (Aritonang et al., 2020).

Data processing uses Microsoft Excel 2019 and SPSS version 22. Statistical analysis uses bivariate and multivariate analysis. The bivariate analysis used was a difference test aimed at finding out the difference between two variables in stunted and non-stunting toddlers. The different tests used are Mann Whitney and Chi Square. Before carrying out the difference test, a normality test was carried out using Kolmogorov-Smirnov and it was found that the variables were not normally distributed with a p value = <0,05. The magnitude of the relationship or risk between variables is seen using the OR (Odds Ratio) value. Multivariate analysis was

carried out to determine the risk factors that influence stunting, namely a logistic regression test with a 95% confidence interval and looking at the OR (Odds Ratio) value to determine the magnitude of the relationship or risk. Data analysis for maternal positive deviance behavior uses data reduction, data display, and conclusion drawing/verification. The data collected on positive deviance behavior of mothers in the locus villages of Barru Regency will be presented in the form of narrative text. Ethical clearance was carried out by the Ethics Committee for Research Involving Human Subjects, Bogor Agricultural Institute. The EC number is No.918/IT3. KEPMSM-IPB/SK/2023 July 12 2023.

Result and Discussion

Toddler Characteristics

The results of toddler characteristics are presented in table 1. Gender is one of the determining factors for stunting in childhood (Cruz et al., 2017). The statistical test results showed that there was no significant difference in the gender distribution of toddlers between the stunting group and the non-stunting group with a value of p=0,584 (p>0,05). According to several previous studies, there is no difference between genders in the incidence of stunting in toddlers (Utami & Mubasyiroh, 2017; Zhang et al., 2016).

The average age of toddlers who are stunted is younger, namely 42,6 months compared to 44,8 months for those who are not stunted. The largest proportion of toddlers who experience stunting is in the 43-59 month age group. The results of the difference test found that there was no significant difference in the age of toddlers in the two groups, shown by the value of p=0,443 (P>0,05). According to Vonaesch et al., (2017) The risk of stunting is 4,5 times greater in toddlers aged between 24-59 months. At this point, some toddlers may face malnutrition problems such as decreased appetite, poor food intake, and reduced sleep hours (Sulistyawati & Pere, 2016).

Table 1. Toddler characteristics

Variable	Stunting		Non stunting		*p-value*	OR	95%CI
	n	%	n	%			
Gender							
Man	12	46,2	30	52,6			
Woman	14	53,8	27	47,4	0,584[1]	0,771	0,304-1,955
Toddler Age							
24-41 month	11	42,3	15	40,4	0,443[2]	1,084	0,423-2,778
43-59 month	15	57,7	34	59,6			
Average±SD (month)	42,6±10,4		44,8±10,6				

[1]uji Chi-Square; [2]uji Mann-Whitney

Mother's Characteristics, Food Expenditure, Eating Parenting Patterns

The majority of mothers' knowledge in the stunting group was in the poor category (43,1%). The statistical test results showed that the value of p=0,002 between nutritional knowledge and the incidence of stunting (p=<0,005), this shows that there is a significant difference in nutritional knowledge of mothers from the stunting group and the non-stunting group. The OR value found was 7,940, which means that mothers who have insufficient knowledge about nutrition have a 7,940 risk of having stunted children. Research in Nigeria found that the prevalence of stunting was lowest among those with good knowledge of health and nutrition (Jemide et al. 2016). Mother's knowledge influences children's development in efforts to overcome nutritional problems, especially family nutritional intake. Fulfilling nutritional intake for the family will be a consideration for mothers who are aware of nutrition (Apriluana dan Fikawati 2018).

The results of this study showed that most of the mothers from the stunting group had a height <150 cm (73,1%). Based on the results of statistical tests, it shows that there is a difference in maternal height in the stunting group and the non-stunting group, p=0,001 (p<0,05) with an OR value of 8,337, which means that mothers with a height during pregnancy <150cm have an 8,337 risk of having a stunted child. This is in line with research Sholeha (2023) in Probolinggo Regency found a

relationship between maternal height and the incidence of stunting (p=0,005). The mechanism of the intergenerational relationship to the incidence of stunting can be through the interaction of genetic factors and maternal environmental conditions, especially during pregnancy, such as nutritional consumption. The maternal environment will influence the level and timing of developmental gene expression as an epigenetic phenomenon and is known as imprinting. However, the role of genes in forming a phenotype is only 25%, the rest is environmental factors which play a role in up to 75% (Latif dan Istiqomah 2017). Manggala et al. (2018) states that short mothers may have inadequate anatomical and metabolic systems which can have an impact on the health of the mother and fetus so that it can inhibit intrauterine growth which plays a role in the child's height.

Tabel 2. Maternal characteristics, food expenditures, and eating parenting patterns

Variable	Stunting		Non stunting		p-value	OR	95%CI
	n	%	n	%			
Mother's Characteristics							
Nutrition knowledge							
Not enough	23	88,5	28	49,1	0,002[1]	7,940	2,142-29,441
Good	3	11,5	29	50,9			
Mother's height during pregnancy							
< 150 cm	19	73,1	14	24,6	0,001[1]	8,337	2,901-23,962
≥ 150 cm	7	26,9	43	75,4			
Average±SD (cm)	148,7±4,8		152,3±4,6				
ANC Visit History							
1-3 Kali	16	61,5	8	14,0	0,000[1]	6,409	2,277-18,042
≥ 4 Kali	10	38,5	49	86,0			
Food Expenditures							
Low	12	46,2	35	61,4	0,024[1]	0,539	0,211-1,376
Tall	14	53,8	22	38,6			
Food parenting							
Exclusive Breastfeeding							
No	14	63,6	8	36,4	0,000[2]	5,250	1,794-15,364
Yes	12	19,7	49	80,3			
Feeding practices							
Not enough	13	40,6	19	59,4	0,001[1]	2,000	0,777-5,149
Good	13	25,5	38	74,5			
Food diversity							
Not diverse	20	76,9	29	50,9	0,000[1]	1,021	0,386-2,704
Various	6	23,1	28	49,1			

[1]uji Mann-Whitney [2]uji Chi-Square

The results showed that the majority of mothers in the stunting group had a history of ANC visits during pregnancy 1-3 times (66,7%). The results of different tests found a difference in ANC visits between the two groups of p= 0,000 (p<0,05) with an OR value of 6,409, which means that mothers who had ANC 1-3 times had a 6,409 risk of having stunted children Darmawan et al, (2022) found a relationship between a history of ANC visits and the incidence of stunting (p=0,044) in toddlers at the Lakudo Community Health Center, Central Buton Regency. Mothers with an incomplete ANC history have a 2,3 times risk of having stunted children (Maharani et al. 2021). Mothers who attend ANC visits according to standards have a lower risk of having stunted children.

One indicator of a society's welfare picture is the proportion of food expenditure. In table 2, food expenditure in the stunting group is in the high category (53,8%). Based on the results of different tests, a significant difference in food expenditure was found, p=0,024 (<0,005). Not in

line with research Aritonang et al. (2021) found that there was no significant difference between food expenditure and stunting. A high proportion of food expenditure provides a picture of inequality and poverty at the household level (Amalia & Mahmudiono, 2017).

Exclusive breastfeeding for 6 months is a strategic key to handling the problem of stunting in toddlers (WHO, 2013). Based on the results of statistical tests, it shows a significant difference in exclusive breastfeeding in the two groups, p=0,000 (<0,05) with an OR value of 5,250, which means that mothers who do not provide exclusive breastfeeding have a 5,250 risk of having stunted children. In line with research Djogo et al. (2020) shows that there is a relationship between the practice of exclusive breastfeeding for 6 months and the incidence of stunting in toddlers. Mothers who do not exclusively breastfeed have toddlers with a 4,016 times greater risk of stunting (Fadjriah et al., 2021). Nasrul et al. (2022) stated that the reasons why mothers of toddlers do not provide exclusive breastfeeding are that breast milk does not want to come out so it is not sufficient for the baby's needs, the mother's employment status, and the mother being sick. Exclusive breastfeeding can reduce stunting because the calcium content in breast milk is absorbed more efficiently (Kismul et al., 2017).

Table 2 shows that there is a significant difference in maternal feeding practices in the two groups, p=0,001 (<0,05) with an OR value of 2,000, which means that mothers with poor feeding practices have a 2,000 risk of having stunted children. Study conducted by. Study conducted by Niga & Purnomo (2016) shows that there is a relationship between the practice of feeding toddlers and the incidence of stunting with a risk of stunting of 2,037 times. The eating pattern used by mothers for their children is a mother's parenting practice which is related to the processing procedures and eating situations (Boucher, 2014).

The description of the quality of food for toddlers from the staple food groups, side dishes, vegetables, fruit and water over a 24 hour period is called food diversity. The results of the difference test show a p value = 0,000 (<0,05), which means there is a difference in food diversity between the stunting and non-stunting groups. The OR value found was 1.021, which means that food intake that is not diverse in toddlers has a 1.021 times greater chance of experiencing stunting. In line with previous research showing that there is a difference between food diversity and stunting (Widyaningsih et al., 2018). High food diversity in toddlers is significant with the mother's good level of nutritional knowledge, especially in terms of caring for feeding (Bi et al., 2019).

Determinant Factors of Stunting

Based on the results of the bivariate analysis, there were seven variables with p-value <0,025 and included in the logistic regression analysis, including maternal height during pregnancy, nutritional knowledge, ANC visits, food expenditure, exclusive breastfeeding, feeding practices and food diversity. Table 3 shows the final logistic regression model which influences the incidence of stunting. Based on the results of logistic regression, there are 3 variables that are significant as determinants of stunting in toddlers, namely height during pregnancy, nutritional knowledge and exclusive breastfeeding.

The risk of stunting is 5,29 times greater in children whose mothers are <150 cm tall with an OR=5,294% CI: 1,569-17,860. Research by Manggala et al. (2018) in several regions of Indonesia explained that mothers with a height <150 cm can increase the incidence of stunting 7,6 times higher in toddlers (OR=7,64; 95%CI: 2,03-28,74). In line with research Kim et al., (2017) in South Asia found that short mothers were 3 times more likely to have stunted children than mothers of normal height (OR=3,37; 95%CI: 2,82-4,03). Maternal genetic height and maternal environmental factors play a role in determining a child's height, especially during pregnancy, such as the mother's cleanliness and nutritional intake during pregnancy. Pregnant women with poor nutritional status and short stature affect the health of the mother and fetus. This causes fetal growth retardation due to insufficient transfer of nutrients to the placenta (Sinha et al., 2018).

The variable that significantly influences stunting is nutritional knowledge. Logistic regression results show that mothers with poor nutritional knowledge are 8,267 times more likely to have stunted toddlers compared to mothers with good nutritional knowledge OR= 8,267% CI 1,694-40,350. In line with research by Choirunnisa et al. (2020) in Tasikmalaya found that mothers with poor nutritional knowledge were 9,413 times more likely to have stunted toddlers. Nutritional knowledge is the basis for

mothers in caring for children, especially in terms of feeding children. Research conducted in Ghana shows that maternal nutritional knowledge is positively related to the diversity of toddlers' consumption, mothers who have good nutritional knowledge are significantly associated with high dietary diversity for toddlers (Al Rahmad et. al., 2023; Bi et al., 2019).

Exclusive breastfeeding is also a variable that has a significant effect on stunting. Logistic regression results show that toddlers who do not receive exclusive breastfeeding are at risk of stunting 4,797 times greater than toddlers who receive exclusive breastfeeding with a value of OR= 4,797% CI 1,191-19,324. In line with Ni'mah dan Nadhiroh (2015) stated that mothers who do not breastfeed exclusively have 3,9 times stunted children Rachmi et al. (2016) found that children who were weaned before the age of 6 months had a much higher chance of stunting According to research Torlesse et al. (2016) found that there is a significant relationship between providing food that is appropriate to the child's age and includes exclusive breastfeeding for children aged 0-5 months and reducing the risk of stunting in children. In addition, children aged 6-24 months who do not receive exclusive breastfeeding are at risk of experiencing stunting 7,86 times higher than children aged 6-24 months who receive exclusive breast milk (Permadi et al., 2016). Devriany et al. (2018) stated that changes in body length increased more quickly in babies who were given exclusive breast milk.

Table 3. Determinant Factors of Stunting

Variabel	OR 95% Cl	p-value
Mother's height during pregnancy		
< 150 cm	5,294 (1,569-17,860)	0,007*
≥ 150 cm		
Nutrition knowledge		
Not enough	8,267 (1,694-4-,350)	0,009*
Good		
Food expenditure		
Low (>60%)	1,143 (0,294-4,438)	0,847
High (≤60%)		
Exclusive breastfeeding		
No	4,797 (1,191-19,324)	0,027*
Yes		
Feeding practice		
Not enough (<80%)	3,297 (0,876-12,412)	0,078
Good (≥80%)		
Food diversity for toddlers		
Not diverse ≤4	0,222 (0,048-1,015)	0,052
Diverse >4		
ANC visit		
1-3 times	2,680 (0,681-10,548)	0,158
≥ 4 times		

*significant if p<0,05

Positive deviance behavior

Mothers' positive deviance behavior was obtained through Focus Group Discussion (FGD) in the PD (Positive Deviance) group consisting of 8 mothers and most of them were Bugis. In this study, the positive deviance behavior of mothers observed was the behavior of mothers from low economic environments but had unique behavior that could influence the nutritional status of toddlers in terms of feeding habits consisting of breastfeeding habits, giving complementary foods and habits. feeding.

Based on the results of the FGD, the mother's positive deviance behavior regarding breastfeeding was that the mother did early initiation of breastfeeding immediately after giving birth with the help of a midwife, the mother gave exclusive breast milk for 6 months, continued breastfeeding for up to 2 years and the mother believed in the myth that there are foods that can help facilitate breastfeeding.

Based on a statement by one of the mothers who underwent early initiation of

breastfeeding, namely when the child was born, he was immediately placed on his stomach on the mother's chest. The midwife advised him to let the child look for the mother's nipple for about an hour. One mother also said that for six months she only gave breast milk without additional supplements such as formula milk and water or honey for six months.

Concepts created by people based on the knowledge they have can include eating habits, beliefs and values towards food, as well as how to cook or process the food (Prastia & Listyandini, 2020). Bugis women do not give babies food or drink because breast milk is considered food and drink which fulfills the baby's needs.

Mothers believe in the myth that there are foods that can help promote breast milk, namely peanuts, sweet palm juice, katuk leaves and papaya flowers. Nursing mothers must pay attention to several things that increase the quality and volume of breast milk they produce, namely increasing consumption of vegetables and fruit (Dolang et al., 2021).

The positive deviance behavior found in the habit of feeding complementary foods was that mothers started giving food at the age of 6 months with a smooth texture like strained porridge. Next, in the feeding stage, the mother gives the child soft porridge from the age of 6-8 months, porridge and soft rice or steamed rice from the age of 9-11 months, and for ≥12 months provides family food. Mothers introduce animal protein more quickly, namely when the child is <1 year old by giving fish, chicken and eggs.

One mother's statement stated that when the child was 6 months old the mother gave him fine porridge that had been strained, the 9 month old child was given regular porridge and when the child was 1 year old he was given plain rice.

According to WHO recommendations, the appropriate stages of feeding for babies start with a smooth texture such as fine porridge at the age of 6-8 months, then at the age of 9-11 months continue with a chopped and soft texture such as steamed rice. After that, at the age of 12 months, family food can be given. The introduction of animal protein is best given to children when giving complementary foods or when the child is 6-11 months old. Based on the results of the FGD, the mother demonstrated the practice of giving complementary foods as recommended by WHO.

The habitual feeding behavior found in mothers of toddlers is in the frequency of giving food to children, namely 3-4 times a day, mothers often accompany children when eating, children start eating alone at the age of 24 months but are often supervised, getting used to eating together, especially children, is a priority for sharing food and Mothers receive information regarding child feeding through counseling at the Integrated Service Post (ISP).

The mother's role in creating a pleasant eating situation for toddlers is by eating while playing until the child has finished eating. A pleasant eating atmosphere can be created at home while playing, listening to fun songs, or eating with other families. This situation is expected to increase the child's appetite. Another important thing to note is that it is not recommended to force children to finish their food (Pratiwi et al., 2021).

The majority of mothers said that children were the priority when distributing food in the family to children, before other family members. Parents, especially mothers, must be diligent when feeding their children, it is better to equate meal times with family meal times because children are enthusiastic about finishing their food, and avoid unpleasant conversations about certain types of food (Pratiwi et al., 2021).

Conclusion

Risk factors for stunting in the stunting locus village of Barru Regency: Mothers with a height <150 cm, mothers with poor nutritional knowledge and not exclusively breastfeeding for up to 6 months. Mother's positive deviance behavior includes implementing Early Initiation of Breastfeeding, practicing exclusive breastfeeding for 6 months, and breastfeeding practices that are continued for up to 2 years, giving at the age of 6 months, the texture stages of giving complementary foods in accordance with WHO recommendations, and introducing protein. faster animals, feeding with a frequency of 3-4 times a day, accompanying children when playing and prioritizing children in the distribution of food in the family.

Overcoming the problem of stunting can be done by increasing health service efforts that

prioritize educational activities in increasing maternal nutritional knowledge regarding exclusive breastfeeding and 1000 first day of life through premarital guidance carried out at the Office of Religious Affairs, counseling at Community Health Centers. It is hoped that further research will use a case control design and use social support variables.

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