Gender Equality Practices: Comparison of Eating Habits in Families With Normal Nutrition, Malnutrition, and Stunting Toddler

Ida Nurmawati[1]*, Ervina Rachmawati[2], Niyalatul Muna[3]

[1, 2, 3] Health Departement, Politeknik Negeri Jember, Indonesia
*Corresponding author. E-mail:ida@polije.ac.id

ABSTRACT

Gender issues in the pattern of nutritional fulfillment for mothers/pregnant mothers and children/toddlers are one of the causes of stunting. Gender equality in terms of fulfilling the nutrition of family members is one way to overcome stunting in Indonesia. The purpose of this study was to determine the differences in the practice of gender equality in eating habits in families with normal, malnourished, and stunted under-fives. This research is an explanatory survey with a case control study design with a case study in Kemuning Lor Village. The research sample was divided into two case samples, namely 29 severely malnourished and stunted toddlers and 29 control samples (normal nutrition toddlers) obtained from a 1:1 comparison of cases with controls. The sampling technique uses quota sampling. The results of the chi square test obtained a Pearson chi square value of 6.891 with ap value of 0.032 meaning that there are differences in the practice of gender equality in eating habits in families of children under five with normal nutrition, malnutrition, and stunting. The percentage of families with normal nutritional status under five who have good gender equality practices (69%) is greater than that of families with less gender equality (31%). The percentage of families with poor nutritional status who have less gender equality practices (71.4%) is greater than families that have good gender equality (28.6%). Meanwhile, the percentage of families with stunting toddlers is more that has good gender equality practices (66.7%) compared to families that have less gender equality practices (33.3%). A suggestion is providing food according to the tastes or preferences of family members to improve eating habits.

Keywords: Gender Equality, Diet, Stunting, Malnutrition

1. INTRODUCTION

Nutritional problems such as malnutrition (severely underweight) and stunting are still big problems that need to be addressed immediately.[1] Malnutrition is nutritional status based on body weight index for age, while stunting is nutritional status based on body length index for age.[2]

Public health problems are considered serious, if the prevalence of malnutrition (underweight – severely underweight) is between 20%-29.0% and the prevalence is considered very high if $\geq$ 30% (WHO, 2010). The national prevalence of malnutrition (underweight – severely underweight) in children under five is 19.6%, it means that the problem of malnutrition in Indonesia is still a public health problem approaching a high prevalence (Riskesdas, 2013).[3]

Stunting is a condition in which children fail to thrive in the "golden age" (0-5 years) due to chronic malnutrition and repeated infections, especially at 1,000 HPK. Stunting toddlers are susceptible to disease, and will experience suboptimal brain development which can affect children's intelligence and reduce productivity as adults.[4]

The incidence of stunting under five is a major nutritional problem in Indonesia. The prevalence of stunting under five is higher than other nutritional problems. The prevalence of stunting under five children increased from 2016 was 27.5% to 29.6% in 2017.[1] In the results of Riskesdas 2018 the prevalence of stunting under five was 30.8%.[5] The 2016 Global Nutrition Report reports that in Southeast Asia the prevalence of stunting in Indonesia is the second-highest after Cambodia.[6]

Stunting cases occur through a long process of the human life cycle.[1] As many as 48.9% of pregnant women suffer from anaemia and KEK disorders. This causes 6.2% of BBLR which is one of the main causes of stunting. Inappropriate breastfeeding, food, and parenting patterns in the 0-23 month period interfere with the child's growth and development. Riskesdas 2013 noted that the decline in child growth and development was the result of poor eating patterns for infants and children. This led to an increase in the prevalence of stunting from 29% (0-6 months), to 39% (6-11 months), and to 42% (24-35 months). Stunting is also influenced by maternal nutrition in the previous period (pre-conception), namely women of childbearing age and adolescent girls.[4]

2. METHOD

This research is an explanatory survey[7] to find out whether there is a problem of gender inequality in the pattern of food fulfilment among family members. The study was conducted by assessing the practice of gender equality in the family through a questionnaire and assessing the nutritional status of children under five using STEP-Ap (Stunting Early Prevention Application). The research design was carried out based on the Case Control Study [8], where the research sample was taken for Case (malnutrition) and control then seen how the pattern of family gender equality practices in eating habits in both cases and controls. There are 40 cases of stunting. The case sample is calculated based on the following sample size formula:

$$n = \frac{N}{1 + N(d^2)}$$

n= N/(1+N(d²))

n= 40/(1+40 (0,1²))

n=28.57

n = 29

The number of malnutrition samples was 29 toddlers. The control sample was taken based on a ratio of 1: 1, so that the control sample was 29. So the total sample in this study was 58 children under five.

The sampling technique used for the case sample is simple random sampling, while the control sample is selected based on the Quota Sampling Technique, which is where the sample is taken until a large number of control samples are met. Control samples were taken from around the residence of the case samples. This is done so that the demographic conditions of cases and controls do not differ much.

Univariate analysis was used to describe the research variables. Univariate analysis in this study will obtain a description of the practice of gender equality in family eating habits and the incidence of stunting in Kemuning Lor Village. Univariate analysis is presented in the frequency distribution table. Multivariate analysis in this study was used to determine differences in the practice of gender equality in the family in the pattern of eating habits in families with normal nutrition, malnutrition, and stunting in Kemuning Lor Village. Bivariate analysis using chi square test. If a p value < 0.05 is obtained, then Ho is rejected, it means there is a difference, if the p value is 0.05, then Ho is accepted, which means there is no difference.

3. RESULTS AND DISCUSSION

This study aims to determine differences in gender equality practices in eating habits in families with normal, malnourished, and stunted children. The analysis in this study is in the form of univariate and bivariate analysis. Univariate analysis was used to describe the characteristics of respondents and respondents' answers in the study. Bivariate analysis was used to determine differences in gender equality practices in eating habits in families with normal, malnourished, and stunted children under five. The results of univariate analysis using percentage values and bivariate analysis using chi square test. The characteristics of respondents in this study can be seen in table 1. The results of a bivariate analysis to determine differences in gender equality practices in eating habits in families of normal, malnourished, and stunted toddlers can be seen in table 2.

Characteristics of respondents in the study as shown in table 1, it is known that more than three quarters (98.3%) of the respondents had a high school education, both mother's education and father's education. 1.7% of mothers have junior high school education and 1.7% of fathers have diploma/bachelor degrees. More than three quarters (79.3%) of mothers are in healthy reproductive age, namely the age of 20-35 years and 20.7% of mothers are at risk of reproductive age, namely < 20

years and > 35 years. The nutritional status of mothers and fathers is mostly in normal nutritional status, which is 75.9% (mother's nutritional status) and 81% (father's nutritional status), while mothers and fathers with less nutritional status (less weight) are 10.3% and by 8.6% mothers with obesity nutritional status and fathers with overweight nutritional status. Most families have children between 1-2 children, namely more than a third of new families having one child by 43.1% and families having two children by 41.4%.

0.032 < (0.05) meaning that there are differences in the practice of gender equality in eating habits in families of normal, malnourished, and stunted toddlers. The crosstabulation in table 2 shows that more than a third of families (69%) with children with normal nutritional status have good gender equality practices, which is greater than that of families with less gender equality (31%). More than one third of families with poor nutritional status who have less gender equality practices (71.4%) are larger than families with good gender equality (28.6%). This is different from families

Table 1 Characteristics of research respondents

No	Characteristics of Respondents	f	%
1	Father's Education		
	senior High School	57	98.3
	Diploma/Bachelor	1	1.7
2	Mother's Education		
	junior high school	1	1.7
	senior High School	57	98.3
3	Mother's Age		
	Healthy reproductive age (20 – 35)	46	79.3
	Reproductive age at risk	12	20.7
4	Mother's Nutritional Status		
	Less BB	6	10.3
	Normal BB	44	75.9
	BB More	3	5.2
	Obesity	5	8.6
5	Father's Nutritional Status		
	Less BB	6	10.3
	Normal BB	47	81
	BB More	5	8.6
6	Number of children		
	1	25	43.1
	2	24	41.4
	3	8	13.8
	4	1	1.7

Source: Primary data, 2021

Table 2 Differences in gender equality practices in eating habits in families of normal, malnourished, and stunted toddlers

Research variable	Nutritional status							
Gender equality practices	Normal		Malnutrition (Severely underweight)		Stunting		Pearson Chi square* (X^2)	p value
	f	%	f	%	f	%		
Well	20	69	4	28.6	10	66.7	6,891	0.032
Not enough	9	31	10	71.4	5	33.3		
Total	29	100	14	100	15	100		

⋆ *Chi-square test*

The results of the chi square test in table 2 obtained a Pearson chi square value of 6.891 with a p value of

with more stunting toddlers who have good gender equality practiceswhich is 66.7% compared to families who have less gender equality practices (33.3%).

The results of data collection through questionnaires obtained several respondents' answers that can be used to describe differences in gender equality practices in eating habits in the family. The description of the respondents' answers can be seen in table 5.3.

Respondents' answers in table 5.3 can illustrate that there is a 36.2% difference in the frequency of eating between fathers, mothers and children. Based on the explanation of respondents' answers in the questionnaire, it is known that children eat less often than adults because they adjust the children's appetite for the food menu served.

mothers and 81% of fathers are in normal nutritional status, 43.1% of families have one child and 41.4% of families have two children. 69% of families with normal nutritional status have good gender equality practices, 71.4% of families with poor nutritional status have poor gender equality practices, while 66.7% of families with stunting toddlers have good gender equality practices.

There is differences in gender equality practices in eating habits in families of normal, malnourished, and stunted toddlers ($X^2=6.891$; p value $0.032 < 0.05$). There is a difference in the frequency of eating between fathers, mothers and children by 36.2%, by 24.1%

Table 3 Percentage of respondents' answers about the practice of gender equality in eating habits in the family

No	Question	%	
		Yes	No
1	Is there a difference in the number of meals in a day between father, mother, and child?	36.2	63.8
3	In the family, do parents allow sons and daughters to increase the amount of food when the food is finished?	19	81
4	When pregnant, is there a food menu that pregnant women can't eat?	65.5	34.5

*Source: Primary data, 2021

As much as 24.1% of families have a difference in the frequency of eating between boys and girls. Based on the explanation of respondents' answers in the questionnaire, it is known that the difference in the frequency of eating in boys and girls is because boys are more active so that boys eat more often than girls. In addition, the pattern of eating habits related to the frequency of eating in children is due to factors such as the child's appetite for the food menu served in the family.

Differences in eating habits are clearly visible in pregnant women in the family, namely 65.5% of pregnant women have dietary restrictions. Based on the explanation of respondents' answers, it is known that some foods are avoided by pregnant women such as pineapples and durians because they are considered to trigger contractions, baked and undercooked food, seafood (sea fish, prawns) because they smell fishy which makes you nauseous, mutton which is considered not good for health. The health of pregnant women, and foods that contain high sugar.

4. CONCLUSION

Characteristics of respondents in the study, among others, more than three quarters (98.3%) of mothers/fathers had a high school education, more than three quarters (79.3%) of mothers were in healthy reproductive age, namely aged 20-35 years, 75.9%

families have a difference in the frequency of eating between boys and girls, by 65.5% pregnant women have dietary restrictions.

Suggestions for solving the problems are providing food according to the tastes or preferences of family members to improve eating habits, Giving MPASI to children with a variety of menus made from locally processed ingredients can improve children's eating habits and prevent picky eaters, There needs to be socialization and training on how to process a variety of foods so that children like them, and Utilization of information technology to increase the knowledge of families and pregnant women about the nutritional content of food and how to process healthy food so that the nutritional content can be maintained

AUTHORS' CONTRIBUTIONS

ACKNOWLEDGMENTS

023.18.2.677607/2021 November 23, 2020 Fiscal Year 2021.

REFERENCES

[1] Kemenkes RI. *Buletin Stunting : Situasi Balita Pendek (Stunting) Di Indonesia*. Vol 301. Jakarta: Pusta Data dan Informasi Kementerian Kesehatan; 2018.

[2] Kementerian Kesehatan. *Buku Saku Pemantauan Status Gizi Tahun 2017*. Jakarta: Kementerian Kesehatan Republik Indonesia; 2018.

[3] Rahayu A, Yulidasari F, Octaviana A, Anggaini L. *Study Guide-Stunting Dan Upaya Pencegahanya Bagi Mahasiswa Kesehatan Mayarakat*. Yogyakarta: CV. Mine; 2018.

[4] Tim Nasional Percepatan Penanggulangan Kemiskinan (TNP2K). *Strategi Nasional Percepatan Pencegahan Anak Kerdil (stunting) periode 2018-2024*. Jakarta: Sekretariat Percepatan Pencegahan Stunting Sekretariat Wakil Presiden Republik Indonesia

[5] Kemenkes RI. Laporan Nasional Riskesdas 2018. *Badan Penelit dan Pengemb Kesehat*. 2018:198. http://labdata.litbang.kemkes.go.id/images/downlo ad/laporan/RKD/2018/ Laporan_Nasional_RKD2018_FINAL.pdf.

[6] International Food Policy Research Institute. *From Promise to Impact Ending Malnutrition by 2030*. Washington DC: IFPRI; 2016.

[7] Notoatmodjo S. *Metodologi Penelitian Kesehatan*. Jakarta: Rineka Cipta; 2012.

[8] Hidayat AA. *Metode Penelitian Kesehatan Paradigma Kuantitatif*. Surabaya: Health Books Publishing; 2015.