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THE RELATIONSHIP BETWEEN EXCLUSIVE BREAST FEEDING AND EARLY GENESIS MPASI *STUNTING* IN CHILDREN AGED 12-24 MONTHS IN THE DISTRICT OF SKANTO, REGENCY OF KEEROM

Yulia N. K. Wasaraka* and Cita Reast Wulansari

[1,2]Marthen Indey Hospital Nursing Academy Jayapura.

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***Corresponding Author**
Yulia N. K. Wasaraka
Marthen Indey Hospital
Nursing Academy Jayapura.

ABSTRACT

Background: Stunting is a form of malnutrition that is marked with the height according to the age of below standard deviation (<-2) with reference to the World Health Organization. In Indonesia about 7.5 million toddlers experiencing stunting. Exclusive breast milk very strong association with decreased risk of stunting. Exclusive breast feeding during the first 6 months and the right able to degrade MPASI numbers stunting. The purpose of : Find out the relationship between exclusive breast feeding and early genesis MPASI stunting in children aged 12-24 months in the District of Skanto, Regency Keerom.

Method: This type of observational research design with cross-sectional. Research subject children aged 12-24 months in the District of Skanto. The selection of the sample using the technique of purposive sampling with a total sample of 92 children. The data were analyzed by using statistical test of chi-square. **The results** of the 38.04%: there is a child who belongs to a stunting. The results of the analysis of chi-square indicates that there is a meaningful relationship between exclusive breast feeding (P = 0,021), birth weight (P = 0.000) and frequency of malaria (P = 0,013) against the incidence of stunting. However, there is no meaningful relationship between awarding MPASI, number of children in the family, the frequency of diarrhea respiratory against Gen. stunting (P > 0.05). **Conclusion**: There is a relationship between exclusive breast feeding, the child's birth weight and frequency of events malaria stunting.

KEYWORDS: Stunting, exclusive Breast milk, food Companion breast feeding (MPASI), Stunting, Toddler of Keerom Regency.

INTRODUCTION

Stunting the growth of the body is one form of malnutrition that is marked with the height according to the age of below standard deviation (<-2) with reference to the World Health Organization (WHO) 2005. The process for becoming a child's short stature (stunting) or the so-called failure of growth (growth faltering) begins in the womb.[1] Failure of growth on the age of the first two years of life have a permanent impact and is very difficult to return globally, 26% or 165 million children under age five years (toddlers) in years 2011 experience stunting. In Indonesia, about 7.5 million toddlers experiencing stunting.[3] in Papua Province there are 15 counties (51.7%) which has a prevalence of stunting rate case is very bad (> 40%). Meanwhile, in the Regency Keerom there is a prevalence of cases of stunting is highest (42.8%) compared to the Regency Jayapura (35%) and Jayapura (34.8%).[4]

Stunting in toddlers is a risk factor to increase the death rate, lower cognitive ability and motor development is low and functions of the body aren't balanced.[5] Child stunting entering adulthood have a tendency to be overweight and experiencing chronic diseases in adulthood.[6,7] Stunting long term is reflections of the quality and a quantity of food is inadequate and often has infections in childhood.[8] Exclusive breast milk very strong associations with decreased risk of stunting. Promotion of breast milk is one of the key components to address the problem of stunting. 8 Exclusive breast feeding during the first 6 months and the right able to degrade MPASI numbers stunting.[9,10,11]

Breast feeding which is less than 6 months or the MPASI/formula too early can increase the risk of *stunting* due to baby's digestive tract is not yet perfect, so the babies tend to be more easily affected by infectious diseases such as diarrhea.[12,13]

To identify a problem *stunting* , researchers want to find out the relationship between exclusive breast feeding and early genesis MPASI *stunting* in children aged 12-24 months in the District of Skanto, Regency Keerom.

RESEARCH METHODS

This type of research is observational study with *a cross-sectional study*. Research conducted in the District of Skanto, Regency Keerom. The subject of research is children aged 12-24 months. The mother or primary caregiver is the respondent. The number of research subjects

adah 92 children. Sampling techniques was using *Consecutive Sampling.* Statistical tests were used to analyze data is a test of *chi square.*

RESEARCH RESULTS

The number of research subjects is 92. Most of the child-sex female good group *stunting* or normal (57.60%). Length according to the age of the subjects most have a *Z-score* ≥-2SD (normal) and the percentage of 61.96%, while of 38.04% belongs to *stunting.* Most of the mother's age ranging between 20-34 years (69.57%), both mothers who have a normal child or *stunting*. The majority of the number of children in the family is ≥ 2 children (70.65%). Most of the mothers are housewives (95.65%) and educated at the final SD group *stunting* and high school at the normal group, with respective percentage of 40% and 31.58%.

Generally the work of father is self-employed/service (41.30%) both on a group of child *stunting* and normal. The results showed that the majority of child *stunting* is not getting exclusive breast milk (68.57%), while most children get breast milk exclusively ≥ 6 months (43.86%).

There are statistical tests based on the relationship between exclusive breast feeding against the incidence of stunting (P = 0,021). Most of the time breast feeding the child was aged ≥ 6 months with the respective percentage of 68.57% and 56.14%. Most children get colostrum after birth (69.57%), both on normal and stunting groups.

There is no meaningful relationship between awarding MPASI and colostrum against stunting incident. Group stunting, children with low birth weight (2500 grams <) amounted to 31.43%, whereas in a normal group, children with low birth weight (2500 grams <) amounted to 3.51%. Based on statistical tests there is a meaningful relationship between birth weight children against Gen. stunting (P = 0.000). However, there is no meaningful relationship between the numbers of children in the family against the incidence of stunting.

Infectious diseases are examined in this research include diarrhea, malaria and respiratory. Most of the children in the group stunting or normal has a frequency of diarrhea sometimes (1 times in 1 month) i.e. of 58.70%. So did the frequency of respiratory, namely of 59.78%. There is no meaningful relationship between the frequency of diarrhea and respiratory against Gen. stunting. While the frequency of malaria in a group of stunting the vast majority is sometimes (1 time in 1 month) and the percentage that is 57.14%, whereas in a normal child

group is never (63.16%). There is a meaningful relationship between the frequency of malaria with incidence of stunting (P = 0.013).

DISCUSSION

A variety of research *cross-sectional* on toddlers in different regions have a proportion of *stunting* the bervarisasi. Compared with previous studies, the proportion of *stunting* on research is much smaller than the proportion of *stunting* in Kenya (47%) and India (52.3%).[14,15] However, it is higher than the proportion of *stunting* in Latin America (16.1%) and South America (13.8%).[16] the proportion of *stunting* toddler in domination by the boys. This is because boys have a greater risk for experiencing *a stunting* than girls.[17]

The study found a relationship between exclusive breast feeding against the incidence of stunting. Exclusive breast feeding is the most dominant factor against their residence status of stunting in children.[13] Children who were given breast milk during the first 6 months will grow good; because breast milk helps protect your baby from infection and disease maintain body growth optimally.[18] there is no relationship between the timing of administering MPASI stunting of events. It can be by the quality and quantities of food companion breast milk (MPASI) given to children are inadequate. Most of the events occur in early stunting the first two years of life, which requires more nutrients. Although breast milk is optimum, but the quality and quantity of food that is given after 6 months is not adequate, then the child can become stunted.[16]

There is a meaningful relationship between birth weight children stunting of events. This is in line with some studies suggesting that children born with weight below 2.5 Kg would have a risk of 3.63 times more likely to be stunted.[19] Low birth weight is the strongest predictor of occurrence of stunting on children aged 12 months.[20] low birth weights is the result of chronic malnutrition that proves how important prevention of less nutritional status during pregnancy and pre conception there is no meaningful relationship between the numbers of children in the family against the incidence of stunting. The results of this research were not in line with Research suggesting that the number of children in the family may affect the nutritional status of the child.[21]

In this study there is no meaningful relationship between the frequencies of diarrhea against the incidence of stunting. This can be due to the frequency of diarrhea that in most of the children suffered only occasionally (1 times in 1 month) and belongs to the mild diarrhea so

as not to result in the child is dehydrated and malabsorbtion nutrients that can lowering the status of the gizinya[21] there is no relationship between the frequency of respiratory stunting of events, this is not in line with the results of the research it may occur because of respiratory frequency experienced by children only happens sometimes (1 time in 1 last month) and not returning, and handled quickly so that the duration of respiratory did not last long and not have an impact on growth failure (stunting).

The study found a relationship between the frequencies of malaria a stunting of events. This can happen because although the frequency of malaria only happens sometimes (1 times in the last 2 months), but it lasts a long time and are not dealt with quickly, resulting in a decrease in appetite, nutrition and malabsorbtion changes in body metabolism which causes reduced dietary intake and ultimately impact on the nutritional status of the child (stunting). 22 this research has some drawbacks, namely the study only measured the time granting MPASI without measuring quality and quantity of MPASI given. The study also did not measure the duration of episodes/infectious disease so unknown severity of infectious diseases.

SUMMARY

There is a relationship between exclusive breast feeding against the incidence of stunting. However, there was no relationship between early geneses MPASI stunting in children aged 12-24 months in the District of Skanto, Regency Keerom.

Suggestion

hould be given health counseling regarding breast milk exclusively to improve the knowledge of mothers about the importance of exclusive breast milk to prevent uses Genesis Keerom Regency in stunting. The importance of education to the mothers about 1000 PPC to prevent mother gave birth to a baby with low birth weight. The granting of additional nutrients (Folic Acid tablet Fe, Zn, and vitamins) can be done anyway to prevent expectant mothers nutritional deficiencies that resulted in the birth of babies with low birth weight to prevent the incidence of stunting Keerom Regency.

REFFERENCES

1. United Nations Children's Fund (UNICEF) Indonesia. 2012. Ringkasan Kajian: Gizi Ibu dan Anak.

2. Bhutta Z.A., Ahmed T, Black R.E., Causens S., Dewey K., Glugliani E., Haider B.A., Kirkwood B., Morris S.S., Sachdev H.P.S., Shekar M. What Works? Interventions for Maternal and Child Undernutrition and Survival. Lancet Series, 2008.
3. United Nations Children's Fund (UNICEF). 2013. Improving Child Nutrition. New York.
4. FSVA Papua. 2015. Peta Ketahanan dan Kerentanan Pangan 2015. Badan Ketahanan Pangan dan Koordinasi Penyuluhan Provinsi Papua.
5. Allen, L.H. & Gillespie, S.R.What works? A review of the efficacy and effectiveness of nutrition interventions. Manilla : ADB, 2001.
6. Victora C.G., Adair L., Fall Caroline, Hallal P.C., Martorell R., Richter L., Sachdev H.S. Maternal and Child Undernutrition: Consequences for Adult Health and Human Capital.Lancet, 2008; 371: 340–57.
7. Santos I.S., Matijasevich A, Domingues M.R., Barros A.J.D., Victora C.G., Barros F.C. Late Preterm Birth is a Risk Factor for Growth Faltering in Early Childhood: a Cohort Study. BMC Pediatrics, 2009; 9: 71.
8. Shrimpton R, Victora C.G., de Onis M, Lima R.C., Blossner M, Clugston G. Worldwide Timing of Growth Faltering: Implications for Nutritional Interventions. Pediatrics, 2001; 107(5).
9. Gupta A, Dadhich J.P., Faridi M.M.A. Breastfeeding and Complementary Feeding as a Public Health Intervention for Child Survival in India. Symposium on Child Survival in India: Part II. Indian Journal of Pediatric. January, 2010.
10. Marriott B.P., White A.J., Hadden L, Davies J.C., Wallingford J.C. How Well are Infant and Young Child World Health Organization (WHO) Feeding Indicators Associated with Growth Outcomes? An Example from Cambodia. Matern Child Nutr, 2010; 6(4): 358-73.
11. Zhou H, Wang X.L., Ye F., Zeng X.L. Relationship between Child Feeding Practices and Malnutrition in 7 Remote and Poor Counties, P R China. Asia Pac J Clin Nutr, 2012; 21(2): 234-240.
12. Simondon KB, Costes R, Delaunay V, Diallo A, Simondon F. Children Height, Health and Appetite Influence Mother Weaning Decicions in Rural Sinegal. International Journal of Epidemiology, 2001; 30: 476-48.
13. Rahayu, LS, Julia, M. And Gunawan, I.M.A. Associated of Height of Parents with Changes of Stunting Status from 6-12 Months to 3-4 Years. [Tesis]. Yogyakarta : Universitas Gadjah Mada, 2011.

14. Bloss Emily Wainaina, Fidelis, and Bailey Robert C. Prevalence and Predictors of Underweight, Stunting, and Wasting among Children Aged 5 and Under in Western Kenya. Journal of Tropical Pediatrics, 2004; 50(5).
15. Deshmukh P.R., Sinha Nirmalya, Dongre A.R. Social Determinants of Stunting in Rural Area of Wardha Central India. Medical journal Armed Forces India, 2012; 1-5.
16. Black R.E., Allen L.H., Bhutta Z.A., Caulfield L.E., de Onis M., Ezzati M., Mathers C., Rivera J.Maternal And Child Undernutrition: Global and Regional Exposures and Health Consequences. Lancet series, 2008.
17. Wamani Henry, Amstrom Anne N., Peterson Stefan, Tumwine James K. dan Tylleskar Thorkild. Boys Are More Stunted Than Girls in Sub-Saharan Africa: A Meta-Analysis Of 16 Demographic and Health Surveys. BMC Pediatrics, 2007; 7: 17.
18. United Nations Children's Fund (UNICEF). 2010. Penuntut Hidup Sehat. Kementrian Kesehatan Republik Indonesia. Jakarta.
19. Rehman A.M., Gladstone B.P., Verghese V.P., Muliyil J., Jaffar S., Kang Gagandeep. Chronic Growth Faltering among a Birth Cohort of Indian Children Begins prior to Weaning an is Highly Prevalent at Three Years of Age. Nutrition journal, 2009; 8: 44.
20. Espo M.T., Kumala K., Maleta T., Cullinan M-L. Salin P., Ashom. Determinants of Linear Growth and Predictors of Severe Stunting during Infancy in Rural Malawi. Acta Paediatrict, 2002; 91: 1364-1370.
21. Wahdah Siti. 2012. Faktor Resiko Kejadian Stunting pada Anak usia 6-36 bulan di Wilayah Pedalaman Kecamatan Silat Hulu Kabupaten Kapuas Hulu Provinsi Kalimantan Barat. Thesis. Universitas Gadjah Mada.
22. Peter Katona & Judit Katona. The Interaction between Nutrition and Infection.Clinical Infectious Diseases Society of America, 2008; 46: 1582-8.