

FACTOR RELATED TO STATUS OF CHILDREN IN TENAYAN RAYA REGION AND RUMBAI BUKIT DISTRICTS OF PEKANBARU IN 2014

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Abstract

Nutritional status is a medical circumstances associated with the use of food by the body. The prevalence of malnutrition in children under five in Indonesia in 2013 was 19.6% (2013). Riau Province in 2012 there were 3.625 (18.66%). Incident of BGM in Pekanbaru ranks third in Riau provinces which is 671 (8,4%). This study aims to identify the factors related to Nutritional Status of children Tenayanraya Region and Rumbai Bukit District of Pekanbaru in 2014. This Study was analytical design by using cas control with sistematis random sampling technique. The total number of samples were 410 respondents which divided into 205 samples cases and 205 samples as a control. Results of the bivariate selection there are seven variables with($p = 0,004$; 0.05) was variable mother's knowledge, education, parenting pendapatn family, health care, history of infectious diseases and environmental sanitation in multivariate there is one variable with ($p = 0,004$; $0,05$) in variable environmental sanitation. The conclusion of this study gained the most independent variables which are most associated are sequentially is education, knowledge, parenting, income, health care, history of infectious diseases, environmental sanitation. It is recommended to: Provide the training on how to manage food that is nutritious, health promotion Intensified by health center staff and provide health education on hygiene in the form of in the household.

Keywords: Nutritional Status, Toddler

BACKGROUND

Nutritional problem essentially is a public health problem , the countermeasures should involve a wide range of related sectors . Nutritional problems arise as a result of compliance issues of food consumption at the household level . In that respect nutritional problem is no longer merely a health problem but also a problem of poverty , education and family pendapatanpemeratan that it will affect the nutritional status of individuals, households , namely how households obtain food for all their members .

The first direct cause of malnutrition is in the form of food intake does not meet the amount and composition of substances that meet household food availability at home . The second is the direct cause of infectious diseases

Infectious diseases closely associated with poor sanitation and environment . Indirect factors are parenting is influenced by the level of education that affect knowledge , family income to meet the food needs of their family members , access to basic health services that are affordable to families in need .

According to UNICEF - WHO- The World Bank Joint Child Malnutrition in 2012 an estimated 101 million children under age five around the world have a weight problem is less meaningful to millions of children are still included in the category of risk (Almatsier , 2010) .

Of health research data base (Riskasdas 2010) about the nutritional status of children conducted in 2007 and 2010 consistently show that the average intake of calories and protein toddlers still below

minimum level of dietary nutrition (AKG). In addition as a result of malnutrition can affect learning ability so as to have reduced the risk of losing the level of intelligence or intelligence quotient (IQ) by 10-15 points (Bappenas, 2001)

Based on data from Riau Province, in 2012 there were 3.625 (8.66%) infants with BGM category. While the city of Pekanbaru located on the third level which has a toddler with BGM category as many as 671 (0.84%) infants (Profile Riau Province). There are two districts with the highest malnutrition status in Pekanbaru the District Tenayan Kingdom and Tassel Hill with a total number of 243 children BGM. Based on the morphology of the mainland city of Pekanbaru, District Tenayan Kingdom and Rumbai stream sediment and marsh areas, and most of the areas prone to inundation and floods (Bappeda Riau Province).

Subdistrict Tenayan Kingdom has an area 171.27 km² with a population of 12 553 (people / km²). Has two health centers, namely health centers and health centers Rejosari RI Tenayan Kingdom. In 2013 in the district Tenayan Kingdom there is a toddler with BGM as many as 102 children.

This study aims to identify factors - factors related to Nutritional Status Work Area Toddler in the District and Sub-District Tenayan Rumbai Bukit Raya Pekanbaru City Year 2014".

METHODE

Research design

This research is a quantitative analytical case-control study design types.

Location and Time of Research

In the sub-district Puskesmas Tenayan highway and sub-district Puskesmas Rumbai.

Population.

The population in this study were all under five living in sub-district Puskesmas Tenayan highway and sub-district Puskesmas Rumbai

Sample

sample in this study consisted of a sample of 205 cases of children suffering from malnutrition and a control sample as many as 205 children with good nutritional status

Data Collection Tool

Data collection tool was a questionnaire given directly to mothers who are included in the sample criteria

RESULT

Results of univariate analysis on the independent variables showed mothers with low knowledge as much as 201 (49.0%), children under five suffering from infectious diseases 190 (46.3%), parenting less as many as 192 (46.8%), health services less 201 (49.0%), environmental sanitation unhealthy as much as 177 (43.2%), mother with low education 179 (43.7%), families with incomes less than 208 (50.7%). Results of bivariate analysis known independent variables associated with nutritional status, namely Education, knowledge, income, illness infeski, Environmental sanitation, parenting with (pvalue = 0.005)

Tabel 1
Resume Analisis Bivariat

Respon Analisis Bivariat									
No	Variabel	Status Gizi						Nilai P	OR (95% CI)
		Kasus		Kontrol		Jumlah			
		N	%	N	%	N	%		
1.	Pengetahuan Ibu								
	Rendah	171	83,4	306	14,6	201	49,0	<0,001	29.338 (17,195 - 50.057)
	Tinggi	346	16,6	54	2,4	519	12,6		
	Total	205	100	205	100	410	100		
2.	Riwayat Penyakit Infeksi								
	Sakit	152	74,1	385	18,5	190	46,3	<0,001	12,604 (7,869- 20.186)
	Tidak Sakit	539	25,9	167	7,5	537	12,6		
	Total	205	100	205	100	410	100		
3.	Pola Asuh								
	Kurang	170	82,9	227	10,7	192	46,3	<0,001	42,403 (22,788 - 71,634)
	Baik	351	17,1	33	1,3	538	12,6		
	Total	205	100	205	100	410	100		
4.	Akses Pelayanan Kesehatan								
	Kurang	144	70,0	578	27,8	201	49,0	<0,001	6,129 (3,996- 9,402)
	Baik	618	29,8	148	6,8	519	12,6		
	Total	205	100	205	100	410	100		
5.	Sanitasi Lingkungan								

Tidak Sehat	12	62,	49	23,	17	43,		
	8	4		9	7	2		
Sehat	77	37,	15	76,	23	56,	<0,00	5,292
		6	6	1	3	8	1	(3,451-8,117)
Total	20	100	20	100	41	100		
	5		5		0			
6. Pendidikan Ibu								
Rendah	16	78,	19	9,3	17	43,		
	0	0		9	9	7		34,807
Tinggi	45	22,	18	90,	23	56,	<0,00	(19,559
		0	6	7	1	3	1	-
Total	20	100	20	100	41	100		61,942)
	5		5		0			
7. Pendapatan Keluarga								
Kurang	15	74,	57	27,	20	51,		
	2	1		8	9	0		7,447
Cukup	53	25,	14	72,	20	49,	<0,00	(4,810-
		9	8	2	1	0	1	11,529)
Total	20	100	20	100	41	100		
	5		5		0			

Tabel 2
Model akhir Multivariate

No	Variabel	Nilai P	OR	(95%CI)	
				Lower	Upper
1	Pendidikan Ibu	<0,001	18,648	6,811	51,058
2	Pengetahuan Ibu	<0,001	15,567	6,001	40,386
3	Pola Asuh	<0,001	10,900	4,291	27,686
4	Pendapatan Keluarga	0,002	4,446	1,764	11,208
5	Akses Pelayanan Kesehatan Riwayat	0,017	3,089	1,224	7,800
6	Penyakit Infeksi	0,020	2,986	1,185	7,528
7	Sanitasi Lingkungan	0,066	2,477	0,942	6,512

DISCUSSION

Independent Variables Relating to the Status of Cause and Effect Toddler Nutrition

Maternal education

From the analysis of the variables of Education is known that there is a strong and significant correlation between maternal education with nutritional status of children. Value odds ratio 18.648 95% CI = 6.811 to 51.058 and P value <0.001. It means children who have low education ibuyang 19 times their babies at risk of malnutrition than in infants whose mothers were educated.

Pelitian results support the theory Arita, et al (2009) which stated that the elements of mother's education affects the quality of childcare, better educated when it understands

how asu feeding patterns and the use of health services. The level of education also participated in determining whether or not a person easy to absorb and understand the knowledge of nutrition they receive. The higher the education the easier person to receive information about nutrition (Bappenas, 2011).

Education is a factor that is necessary to show that the importance of higher education owned mothers who have children working area Tenayan highway districts and Tassel. That is owned by a mother's education is closely related to the level of knowledge of health care, higine, child health and nutrition awareness. Besides, education also affects the economic status, income, occupation and residence of mothers who have children dikecamatan Tenayan Kingdom and Rumai.

Parenting is a factor associated with infant nutritional status in the Work Area of the District Tenayan Kingdom and Tassel. Good parenting on children in feeding and food preparation will affect on the growth of children in the work area. Good parenting on children such as feeding and preparation of food in accordance with the toddler age will affect the growth of children, so that children in having good parenting will have good nutritional status. Conversely, if a toddler who has parenting is not good, such as solid foods too early or additions can interfere with exclusive breastfeeding so that children will easily malnourished.

Family income

From the analysis of the income variable is known to korelas strong and significant correlation between income with Toddler Nutritional Status. Odd Ratio value of 4.446 with CI 95% = 1,764- 11.208. It means that children with family income less will be 5 times the risk of suffering from malnutrition than in infants with a family income that is sufficient.

Poverty is considered as the cause of malnutrition, because poor families can not meet adequate food intake and quality, and poor families are usually less educated workers (Soekirman, 2009). Economic status is the position of a person or family in the community based on revenue per month. According to the

Central Bureau of Statistics (2014) the poor are people who have an average per capita monthly expenditure below the poverty line. The poverty line in September 2013 is Rp. 292 951. per capita per month. Line (GK) consists of Food Poverty Line (FPL) Non-Food Poverty Line (GKBM).

Revenues are factors related to the nutritional status of children in the working area of the District Tenayan Kingdom and Tassel. Low family income makes it difficult to meet the dietary intake of adequate and quality. This is because of their low incomes are not enough to buy nutritious food. Non-fulfillment of a good nutritional intake will be at risk of babies experiencing malnutrition.

Health services

From the analysis of the health care variables known to correlate to the StatuGii toddler. By 3089 the value Odd Ratio 95% CI = 1.224 to 7.800. It means that children with less health care will be riskier 3kali malnutrition of children under five with a good health service. health care is the place or the means used for the organization of health efforts. Most people especially the poor people have not been fully able to access health services because of the constraints of distance and transportation costs (Retnaningsih, 2013).

Health care is a factor related to the nutritional status of children in the working area of the District Tenayan Kingdom and Tassel. The good health services were made by toddlers affect nutritional status of children. Still lack access to health services in Sub Tenayan Kingdom and Tassel sttus make babies at risk for malnutrition. Due to some people, especially people belonging to the poor so that is not yet fully able to access health services due to distance constraints and costs.

Knowledge

From the analysis of the variables of knowledge known to korelas strong and significant correlation between knowledge with Toddler Nutritional Status. With a value of 15.567 Odd Ratio 95% CI = 6.001 to 40,386. That is the toddler's mother to be more knowledgeable low-risk 15 times suffer from

malnutrition than children with higher family income.

Good knowledge will influence the pattern of food consumption, so there will be a good nutritional status. The higher the knowledge will further assist the mother in determining the choice of the quality and quantity of food. Mother's knowledge that less will affect the food supply of the family in utilizing nutritious food (Arita, 2009).

CONCLUSION

Independent variables associated causal malnutrition status according to its dominance in a row is the mother's education, parenting, family income, health care, infectious disease knowledge and strength of the relationship between education and mother against nutritional status of children. Variable counfounding, Environmental Sanitation confounding variable to variable Parenting.Environmental Sanitation confounding variables on the variable of Health Services.Environmental Sanitation confounding variable to variable mother education.

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