

Mother's knowledge of nutrition is a risk factor of malnutrition in children under five years old in coastal areas of Kendari City

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OBJECTIVE

This study aimed to assess the risk of mother's knowledge about nutrition to the incidence of malnutrition in children under five years old in coastal areas of Kendari City.

METHODS

This study was observational analytic design with case control approach. The study was conducted in the coastal area of Kendari City, Southeast Sulawesi on November to December 2018.

Case group was mother of children aged 6-59 months who experienced malnutrition in the working area of Abeli, Mata and Benu-Benu Health Center in October 2018. Control group was mother of children aged 6-59 months who did not experience malnutrition. Malnutrition was determined by measuring body weight and then adjusted to the category and threshold of nutritional status based on the body weight index according to age.

There were 64 samples consisted of 16 case and 48 controls. Samples of case group were recruited using total sampling. Samples of control group were recruited using purposive sampling with non-matching method according to the inclusion and exclusion criteria. Mother's knowledge about nutrition was determined using the modification questionnaire.

The Odd Ratio (OR) statistical test was used with a 2x2 contingency table and a 95% confidence level with a significance level of $\alpha = 0.05$.

RESULTS

The majority of respondents were 36-45 years old in the case group (37.5%) and 26-35 years old in the control group (50.0%). The majority of education level was junior high school in the case group (43.7%) and high school in the control group (47.9%). The majority of mother's knowledge about nutrition was less in the case group (81.2%) and good knowledge in the control group (68.7%).

The statistical test results were obtained OR = 9.533 (CI=95%) with Lower Limit (2.361) and Upper Limit (38.501).

Table 1. The characteristics of respondents (n=64)

Variable	Case		Control		
	n	%	n	%	
Child age (months)	6-24	6	37.5	21	43.7
	25-48	10	62.5	25	52.0
	49-59	0	0	2	4.1
Maternal age (years)	17-25	5	31.2	13	27.0
	26-35	5	31.2	24	50.0
	36-45	6	37.5	9	23.5
	≥46	0	0	2	18.7
Maternal education level	Elementary school	5	31.2	6	12.5
	Junior high school	7	43.7	15	31.2
	Senior high School	4	25.0	23	47.9
	College/University	0	0	4	8.3

CONCLUSIONS

Mother's knowledge about nutrition is a risk factor for malnutrition in children aged 6-59 months in coastal areas of Kendari City. Mother's knowledge of nutrition has a 9 times greater risk for malnutrition in children under five years old in coastal areas.

Good knowledge of nutrition and malnutrition is needed to improve public health status. There needs to be an extension program to increase maternal nutrition knowledge.

Table 2. Analysis of mother's knowledge about nutrition for malnutrition

Mother's knowledge	Case		Control		Total	OR	95% CI	
	n	%	n	%			n	Lower
Less	13	81.2	15	31.3	28	9.533	2.361	38.501
Good	3	18.7	33	68.7	36			

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