**RISK FACTORS OF DIARRHEA INCIDENCE IN CHILDREN
AGED 6-24 MONTHS AT MANGULEWA AND KOELODA
COMMUNITY HEALTH CENTERS, NGADA,
KUPANG, EAST NUSA TENGGARA**

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ABSTRACT

Background: Water, sanitation, and hygiene behavior contribute to approximately 94% of the 4 billion cases of diarrhea annually. Although the Indonesian government concerns to improve clean water and sanitation, there are still people with lack of access to safe drinking water and improved sanitation. This study aimed to determine risk factors of diarrhea incidence in children aged 6-24 months in Kupang, East Nusa Tenggara.

Subjects and Method: This was a cross sectional study carried out at Mangulewa and Koeloda community health centers, Ngada, Kupang, East Nusa Tenggara, Indonesia. A sample of 83 children aged 6-24 months was selected by probability sampling. The dependent variable was diarrhea. The independent variables were maternal age, maternal education, employment, exclusive breastfeeding, access to clean drinking water, clean water, sanitation, latrine, and type of floor. The data were collected by questionnaire and observation. The data were analyzed by a multiple logistic regression.

Results: Low maternal education (OR= 5.57; 95% CI= 0.53 to 59.04; $p<0.001$), poor drinking water (OR= 3.70; 95% CI= 0.22 to 62.78; $p= 0.006$), poor hand wash behavior (OR=3.97; 95% CI= 0.19 to 82.37; $p<0.001$), poor access to clean water (OR=22.46; 95% CI= 3.00 to 168.02; $p<0.001$), poor latrine (OR= 49.13; 95% CI= 4.21 to 573.85; $p<0.001$), and ground floor (OR= 8.25; 95% CI= 0.97 to 69.90; $p<0.001$) increased the risk of diarrhea. Maternal employment (OR= 0.13; 95% CI= 0.01 to 2.76; $p= 0.007$) and exclusive breastfeeding (OR= 0.32; 95% CI= 0.02 to 6.19; $p= 0.013$) decreased the risk of diarrhea.

Conclusion: Low maternal education, poor drinking water, poor hand wash behavior, poor access to clean water, poor latrine, and ground floor increase the risk of diarrhea. Maternal employment and exclusive breastfeeding decrease the risk of diarrhea.

Keywords: diarrhea, environmental factors, children aged 6-24 months

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