ABSTRACT

ANALYSIS OF DIARRHEA INCIDENCE RISK FACTORS IN CHILDREN YOUNGER THAN AGE 2 AT DR SOETOMO HOSPITAL SURABAYA

Background: Although treatable and preventable, diarrhea is a leading cause of morbidity and mortality in infants and young children, with 72% of deaths occurring in children below 2 years of age. Diarrhea mortality is highest from age 0–11 months, the ages at which the risk of disease and severity also peak. Diarrhea is especially dangerous in young children because the younger their age is, the higher their risk of excessive fluid and electrolyte loss due to dehydration.

Purpose: To describe the relationship between risk factors for diarrhea and its occurrence in children below age two at Dr Soetomo hospital, Surabaya.

Method: This is an observational case control study. The case group is comprised of children age 2-24 months being treated for diarrhea, and the control group is comprised of children age 2-24 months being treated for conditions other than diarrhea at Dr Soetomo Hospital, Surabaya. Total sampling is used from the period of September 2017 to October 2017. Questionnaires are distributed to both groups to collect data background of the mother and child, the mother’s knowledge about diarrheal disease, and their personal hygiene habits. Univariate analysis is performed to determine frequency distribution. Bivariate analysis using Pearson’s chi-square test of association is used to determine statistical significance.

Conclusion: Statistical testing could not prove a statistically significant relationship between diarrhea risk and mother’s age, child’s age, child’s gender, exclusive breastfeeding, nutritional status, rotavirus immunization, hand and nail hygiene, mother’s education, handwashing habits, and household income. Future studies may be
need to be repeated on a larger sample size to determine statistical the statistical significance of these diarrhea risk factors. Additionally, for more accurate results, the controls in future studies should be children in the local community with normal nutritional and growth status.

Keywords: Diarrhea, risk factor, children, age two, descriptive study, case control, Surabaya.