

Analysis of Risk Factors for Gastroenteritis Acute on Children <5 Based on Inpatients Medical Records at Citra Husada Hospital
Ervina Rachmawati, S.ST., MPH (as chief counselor)

Fasya Nur Alivia Kusnia
Program Study of Health Information Management
Department of Health

ABSTRACT

Acute gastroenteritis (AGE) remains one of the top ten causes of morbidity at Citra Husada Hospital, Jember, during 2021–2024. In 2024, a notable increase was observed, with the highest proportion in toddlers (16.3%), a group vulnerable to impaired growth and development. This study analyzed the relationship between age, gender, nutritional status, history of food allergies, and history of gastrointestinal infections with the incidence of AGE in toddlers. This research employed an observational analytic case-control design. The study population consisted of 143 medical records of toddlers diagnosed with AGE and 1,609 records of toddlers without gastrointestinal diseases as controls. A total of 105 cases and 105 controls were selected using simple random sampling. Data were analyzed bivariately using the Chi-Square test. Significant associations were found between AGE incidence and age ($p=0.001$; $OR=0.234$), nutritional status ($p=0.001$; $OR=14.904$), history of food allergies ($p=0.001$; $OR=8.740$), and history of gastrointestinal infections ($p=0.001$; $OR=22.977$). Gender showed no significant association with AGE ($p=0.779$). Toddlers aged ≥ 2 years with abnormal nutritional status (malnutrition or obesity), a history of food allergies, and previous gastrointestinal infections are at a considerably higher risk of developing AGE. These findings highlight the need for preventive strategies. Health workers should provide education to parents regarding balanced nutrition, the prevention of undernutrition and overnutrition, and the avoidance of allergy-triggering foods to minimize AGE risk and promote optimal child growth and development.

Keywords: acute gastroenteritis, bivariate, case-control, risk factors