

## Acute Gastroenteritis Among Indigenous Paediatric Patients – A Descriptive Study in a Rural District Hospital, Sarawak

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## ABSTRACT

Introduction: Acute gastroenteritis (AGE) is one of the frequent causes of hospitalization in children under the age of five, particularly in a rural setting. This study was conducted to determine the epidemiology of acute gastroenteritis in indigenous children admitted to a rural district hospital in Sarawak. Methods: A retrospective review of indigenous paediatrics cases of acute gastroenteritis admitted to the ward of Serian District Hospital, a rural district hospital in Sarawak, between the years 2006-2007. The data was collected from the patients' case notes, obtained with permission from the hospital management. Data was entered and analyzed using SPSS version 16. Results: During the study period, 234 indigenous children with acute gastroenteritis were admitted with the highest prevalence in 2006 (53.4%). The findings showed higher prevalence was found in children aged 3 years and below (76.5%) and male (56.4%) The minimum duration of hospital stay is 1 day, and the maximum stay is 5 days. The clinical findings showed that the majority of the cases presented with vomiting, diarrhea, dry mouth and tongue, sunken eye, with the majority (76%) reported having mild dehydration. The most common treatment used is oral rehydration solutions (85.4%), followed by intravenous bolus or drip (82.3%), paracetamol (79%) and antibiotic (36.2%). Peak incidence of admissions was between November to January. About 38.5% of the AGE cases admitted were found to be underweight (weightfor-age below -2SD). Conclusion: The findings indicated children aged 3 years and below are the most vulnerable to AGE and malnutrition could be one of the predisposing factors. The peak incidence during the raining season at the end of the year indicated a possible relationship between AGE and seasonal type of virus infection. Prevention in the form of proper hygiene at the household level probably will prove to be useful.

Keywords: Acute gastroenteritis; indigenous; children; Malaysia

## INTRODUCTION

Acute gastroenteritis (AGE) is one of the frequent causes of hospitalization in children under age of five in the hospital setting, both in Malaysia and throughout the world, especially in developing countries<sup>[1, 2]</sup>. It is estimated that approximately 440,000 annual deaths in children <5 years of age worldwide are due to diarrhea related illnesses, with rotavirus as the main cause<sup>[1]</sup>. Due to the inability to cope with greater body fluid loss and immature renal tubular re-absorption process, children tend to face greater risk of being criticall ill and their illness can cause death