

EPIDEMIOLOGICAL ASSESSMENT OF ACTIVE HELICOBACTER PYLORI INFECTION AMONG CHILDREN 6 - 59 MONTHS ATTENDING REGIONAL REFERRAL HOSPITALS DAR ES SALAAM

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ABSTRACT

Background: Helicobacter pylori infection (HPI) is globally a major public health problem with high burden in African countries. In majority of children with H. pylori infection were asymptomatic. However, in some cases gastrointestinal symptoms predominate which are mainly recurrent abdominal pain and occasionally gastric ulcers. However, the epidemiology of H. pylori among children in sub-Saharan Africa is not well understood.

Objectives: To assess epidemiology of active Helicobacter pylori infection among children 6 - 59 months of age attending Regional Referral Hospitals in Dar es Salaam.

Methodology: A health facility based cross-sectional study was conducted among children 6-59 months of age attending Regional Referral Hospitals in Dar es Salaam, Tanzania. A structured questionnaire was used to collect pertinent information from the study participants who were enrolled. Each study participant underwent a complete physical assessment and screening for Helicobacter pylori was carried out among the sample size of 208 children using a rapid stool antigen test. Data was analyzed using SPSS software version 23. Descriptive statistics, prevalence of H. pylori infection and factors associated with H. pylori infection were assessed using Chi-square test or binary logistic regression analysis whenever appropriate. A p value of less or equal to 0.05 was considered statistically significant.

Results: A total of 224 children aged 6-59 months were enrolled. Prevalence of active H. pylori infection was found to be 42/224 (18.8%). The majority of study participants with active H. pylori infection were asymptomatic. Risk factors assessed were age, sex, source of water, overcrowding, level of education of the parents but

none of them were associated with high infection rate of H. pylori infection because the p-values were greater than 0.05. Among those who were positive for active H. pylori 14.3% had various symptoms and signs such as abdominal pain/discomfort, history of constipation, diarrhoea, nausea (among children more than 2 years old) and vomiting. There were no association between clinical presentations and H. pylori infection status.

Conclusions: The study has shown a high prevalence of active Helicobacter pylori Infection of 18.8% in children aged 6-59 months attending Mwananyamala, Amana and Temeke Regional Referral Hospitals in Dar es Salaam. Even though Helicobacter pylori infection is

generally asymptomatic but prolonged duration of infection can lead to complications such as peptic ulcer diseases, gastritis etc.

Recommendations: Further studies with large sample size and in various geographical areas of the country should be conducted to assess the burden of the disease and effect of water, sanitation and hygiene in H. pylori/Infection in our environment.