

**Title: HEALTH DISPARITIES IN CHILDREN WITH H. PYLORI INFECTION
ATTENDING AN URBAN SAFETY NET HOSPITAL IN THE UNITED STATES**

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"Background

H. pylori infection is an important cause of peptic ulcer disease and gastric cancer worldwide. Socioeconomic risk factors like low income, foreign born status, overcrowding, and poor education are associated with this infection in adults in US. Our study aims to examine various markers of health disparities in children with H. pylori infection.

Methods

This is a retrospective study of children (0-18 yrs) who presented with chronic upper gastrointestinal symptoms and were tested for H. pylori infection from 2009-2017 at MetroHealth Medical Center, Cleveland, Ohio. H. pylori positive (cases) and negative (controls) groups were identified based on serology, stool antigen test, breath test, and/or endoscopy-histopathology. Demographic variables were obtained by chart review and were analyzed.

Results

16.4% (226/1380) of patients tested for H. pylori were positive. In the multivariate analysis, the following adjusted odds ratios (95% CI) were significant independent risk factors for H. pylori disease in children: government insurance status [1.950 (1.271, 2.994), $p=0.002$], African-American race [1.568 (1.097, 2.243), $p=0.014$] and age (years) [1.088 (1.050, 1.127), $p<0.001$]. English as the primary language spoken at home was protective against H. Pylori infection [0.521 (0.337, 0.805), $p=0.003$].

Conclusion

In our study, H. pylori infection in children was associated with African-American race, government insurance status- a surrogate marker of low socioeconomic status; and foreign-born status as reflected by English language (as preferred spoken language) being protective for the disease. Understanding such health disparities will prove useful in developing targeted, public-health focused interventions for reducing transmission of H pylori infection in vulnerable children."