

## Abstract

*Helicobacter pylori* is a Gram negative bacterium exclusively found in human gastric mucosa. *H. pylori* infection is recognized as the primary cause of active chronic gastritis and as a significant causal factor in duodenal and gastric ulcer disease. *H. pylori* in the gastric mucosa is a major risk factor for gastric carcinoma and primary gastric B cell lymphoma.

*H. pylori* infection of the gastric mucosa leads to local and systemic immune response predominantly of IgG and IgA type. *H. pylori* serological tests are sensitive, reliable, less invasive, inexpensive and widely used for the diagnosis of *H. pylori* infection. Enzyme linked immunosorbent assay (ELISA) is widely used due to speed, simplicity and reproducibility.

Infection with *H. Pylori* is prevalent worldwide with variation by age, geographic area, race and socio-economic status. The highest prevalence rates are seen in populations of low socio-economic status and education level and in those living in congested dwellings. The diagnosis of *H. pylori* infection using less invasive techniques are not available in our government sector. Therefore, irrational treatment of peptic ulcer disease with antibiotics for an extended period may contribute to the emergence of antibiotic resistance.

Polices and guidelines for the diagnosis and treatment of *H. pylori* infection related diseases are required and those depend on the prevalence and pattern of infection in a given community. Therefore, this study was conducted to determine the

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seroprevalence and factors associated with *Helicobacter pylori* infection among asymptomatic adults.

One hundred and seventy two adult asymptomatic volunteers between the ages 18-60 years participated in this study. Interviewer-administered questionnaire was used to assess the factors associated with infection.

From each participant, 1ml of blood was collected to determine IGg antibodies to *H. pylori* using antigen coated micro well-based enzyme immunoassay (EIA) kit. All assays were performed with positive and negative controls.

Only eight samples were positive for IgG to *H. pylori*. Therefore, the prevalence of *H. pylori* amongst asymptomatic adults in Beruwala MOH area was 4.65%. The lower level of education, higher number of occupants in house and the use of un-boiled water for consumption were associated with *H. pylori* infection in this study.

To evaluate the true situation, as a policy we should develop the test methods in Sri Lanka to be compatible to our local conditions and more extensive studies are required to confirm the associations with *H. pylori* prevalence.