Seroepidemiological survey of the prevalence of Helicobacter pylori infection in Sabah, Malaysia

ABSTRACT

Gastric cancer is an important cause of mortality in Sabah, Malaysia, but the prevalence of Helicobacter pylori infection in this state is unknown. Serology is an important tool for the surveillance of H. pylori infection. The objective of this study was to determine the prevalence of H. pylori infection by serology, and to provide information for policy discussions on H. pylori control programmes in Sabah. Methods: This cross-sectional study analysed serum samples collected from blood donors in a hospital in Kota Kinabalu, Sabah. H. pylori antibody concentration was measured using a commercially available kit. Results: The prevalence of H. pylori was 28.4% (204/718), and the infection rate was highest in subjects aged 30-39 years. Men were more likely to be infected than women. The H. pylori infection rate was highest among those of Kadazan (19.1%) ethnicity, followed by Dusun (15.7%), Bajau (14.7%) and Rungus (10.8%). Binary logistic regression analysis indicated that Chinese (P = 0.026) and Malay (P = 0.035) ethnicities were protective against H. pylori infection compared with other ethnicities. Conclusions: The seropositivity rate of H. pylori in this study was similar to the overall seropositivity rate in Malaysia; however, Chinese and Malay ethnicities were found to be protective against H. pylori infection.