

JAMA – Risk of Recurrent *Helicobacter pylori* Infection 1 Year After Initial Eradication Therapy in 7 Latin American Communities

As reported in [JAMA](#)¹ this week, 1 year after treatment for *Helicobacter pylori* infection, recurrence occurred in 11.5% of the participants who had tested negative for *H. pylori* (using the UBT diagnostic procedure) after treatment. IARC scientists participated in the study, which analysed the results of interventions to eradicate *H. pylori* (a risk factor for gastric cancer) in 7 diverse community populations in Latin America. The recurrence risk ranged from 6.8% in Costa Rica to 18.1% in Colombia. The researchers found that recurrence at 1 year was significantly associated with geographic site, number of children in the household, and non-adherence to therapy, but not with treatment assignment. The authors conclude that recurrence determinants (i.e. non-adherence to therapy and demographic factors) may be as important as the choice of antibiotic regimen in determining the long-term success of *H. pylori* eradication interventions.

The study's findings are relevant to the feasibility of programs for the primary prevention of gastric cancer in high-incidence regions of Latin America. As the long-term effectiveness of *H. pylori* eradication programs for preventing gastric cancer very much depends on recurrence risk and individual and community factors, it is important that factors such as non-adherence and demographics be included in the evaluation of eradication programs at the national and regional levels.

Gastric adenocarcinoma is the second leading cause of cancer death worldwide. Although gastric cancer rates are declining in some areas, the number of deaths from gastric cancer is expected to increase over the next decades due to growing and ageing populations in high-incidence regions such as Latin America and eastern Asia. *H. pylori* infects more than half of the world's adult population, and chronic infection with this bacterium is the dominant risk factor for gastric cancer, accounting for an estimated two-thirds of all cases globally. The study's authors conclude that ongoing research initiatives are needed, given the evidence that eradication of *H. pylori* reduces gastric cancer risk.

¹ Morgan DR, et al. (2013). Risk of recurrent *Helicobacter pylori* infection 1 year after initial eradication therapy in 7 Latin American communities. *JAMA* 309(6):578–586.
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