Increasing primary antibiotic resistance and ethnic differences in eradication rates of *Helicobacter pylori* infection in New Zealand – a new look at an old enemy

**Authors:** Hsiang J et al.

**Summary:** This study recruited 593 patients undergoing gastroscopy between February 2012 and October 2012 and determined the prevalence of primary *Helicobacter pylori* (H. pylori) infection from all Campylobacter-like organism (CLO) tests performed. All patients were attending the Counties Manukau District Health Board (South Auckland) Endoscopy Service. The prevalence of *H. pylori* infection by ethnic group was 7.7% in Europeans, 34.8% in Māori, 31.3% in Pacific peoples and 23.8% in Orientals. Almost half (49.3%) of all isolates were metronidazole-resistant, 16.4% were clarithromycin-resistant and 9.5% were moxifloxacin-resistant. No isolates were resistant to tetracycline. Clarithromycin resistance ($\geq$15%) was prevalent among Māori, Pacific peoples and Orientals. Significant increases were observed in metronidazole resistance from 32.7% in 1999 to 49.3% in 2012 ($p=0.01$) and clarithromycin resistance from 7% in 1999 to 16.4% in 2012 ($p=0.021$).

In an intent-to-treat analysis, the eradication rate with standard omeprazole, amoxicillin and clarithromycin were metronidazole-resistant, 16.4% were clarithromycin-resistant and 9.5% were moxifloxacin-resistant.

No isolates were resistant to tetracycline. Clarithromycin resistance ($\geq$15%) was prevalent among Māori, Pacific peoples and Orientals. Significant increases were observed in metronidazole resistance from 32.7% in 1999 to 49.3% in 2012 ($p=0.01$) and clarithromycin resistance from 7% in 1999 to 16.4% in 2012 ($p=0.021$).

In an intent-to-treat analysis, the eradication rate with standard omeprazole, amoxicillin and clarithromycin therapy was 85.7% in ethnic groups where clarithromycin resistance was <15% versus 64.9% in groups where clarithromycin resistance was $\geq$15% ($p=0.024$).

**Comment:** A good piece of research that attempts to better understand and manage ethnic differences in *H. pylori* infection. A revision of the guidelines is required to ensure that Māori receive the best first-line treatment regimen.

**Reference:** *N Z Med J* 2013;126(1384):64–76

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**Hapū Ora: Wellbeing in the early stages of life**

The research report *Hapū Ora: Wellbeing in the early stages of life* draws on life course, epigenetic and social determinants approaches, along with Māori concepts of pregnancy and wellbeing, to identify key priorities for future Māori maternal health research.

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**Independent commentary by Dr Matire Harwood**

Dr Matire Harwood (Ngapuhi) has worked in Hauora Māori, primary health and rehabilitation settings as clinician and researcher since graduating from Auckland Medical School in 1994. She also holds positions on a number of boards, committees and advisory groups including the Health Research Council. Matire lives in Auckland with her whānau including partner Haunui and two young children Te Rangiura and Waimarie.

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