中文題目: 根除幽門螺旋桿菌和冠心症發生率之關聯性：台灣 12 年全國性世代研究

英文題目: The association of *Helicobacter pylori* eradication and the occurrence of coronary heart diseases in Taiwan: A 12-year nationwide cohort study

作　　者: 王俊偉 [1,2], 曾國綸 [2], 施翔耀 [2], 余方榮 [2], 蔡成枝 [3], 吳登強 [1,2*]

服務單位: 高雄市立大同醫院 內科 [1]，高雄醫學大學附設醫院 胃腸內科 [2]，高雄長庚紀念醫院 胃腸肝膽內科 [3]

Background: So far, there are conflicting evidences on the association of *Helicobacter pylori* (*H. pylori*) to coronary heart diseases (CHD). This study aimed to clarify the relevance between *H. pylori* eradication to CHD in patients with peptic ulcer diseases (PUD) in Taiwan.

Method and Material: We extracted data from Taiwan National Health Insurance Research Database during 2000–2011. All patients with PUD (n = 208196) were screened for eligibility. We divided randomly selected patients into an *H. pylori* eradication cohort (cohort A, n = 3164) and another matched cohort without *H. pylori* eradication (cohort B, n = 3164). Subgroup analysis was performed for early *H. pylori* eradication (≤ 90 days of the diagnosis date, n = 2521) and non-early eradication (within 91–365 days, n = 643) and the time-dependent association between *H. pylori* eradication and risk of CHD, interactions between patient demographic characteristics and therapy by age (≥ or < 65 years).

Result: The results showed that a trend of decreased association of CHD in patients with early eradication was observed compared to those without eradication (2.58% vs. 3.35%, $p = 0.0905$). The mortality rate was lower in early eradication subgroup compared to cohort B (2.86% vs. 4.43%, $p = 0.0033$). Interestingly, there was also significant difference observed in composite end-points for CHD and death in the early eradication subgroup (0.16% vs.0.57%, $p = 0.0133$). Further, the cumulative CHD rate was significantly lower in younger patients (< 65 years old) with *H. pylori* eradication therapy started < 1 year compared to those patients without eradication at all ($p = 0.0384$); the treatment did not appear to have an effect in older patients (≥ 65 years old) ($p = 0.1963$). Multivariate analysis showed that hypertension and renal diseases were risk factors for CHD in patients without eradication whilst younger patients (< 65 years old) with *H. pylori* therapy was a protective factor.

Conclusion: In conclusions, the trend of decrease in CHD occurrence after early *H. pylori* eradication in addition to the significant decrease in composite end points for CHD and death, and the significantly lower cumulative CHD rate in younger patients < 65 years old with *H. pylori* treated within 365 days suggested that there was positive association between *H. pylori* eradication and CHD.