patients. However, gender differences in adherence rates to recommendations for healthy lifestyle aren’t well known.

**Aims:** To ascertain gender differences in healthy lifestyle adherence at 12 month follow-up after percutaneous coronary intervention (PCI) for CAD.

**Methods:** Patients who underwent PCI at three hospitals were prospectively followed throughout hospital admission, at 30 days and 12 months. The primary endpoint was adherence to a healthy lifestyle defined as 3/3 of heart-healthy diet, physically active and no current smoking. Secondary endpoints included each aspect of this primary endpoint, change from baseline cholesterol levels and cardiac rehabilitation attendance.

**Results:** 729 people (26% female) were recruited. Women were older, with more diabetes and lower baseline TC and LDL. Adherence to healthy lifestyle at 12 months post-PCI was 56.6% with no significant difference between genders (51.3% vs 58.5%, p = 0.084). Women were more sedentary compared to men (38.7% vs 21.8%, p = 0.001). Men smoked more (33.8% vs 7.7%, p = 0.020), with no significant difference in healthy eating habits (82.4% vs 85.7%, p = 0.309). Women had a smaller reduction in mean LDL (0.60 vs 0.89, p = 0.23) and TG (0.34 vs 0.44, p = 0.46). Less women attended cardiac rehabilitation (58.2% vs 66.4%, p = 0.045).

**Conclusions:** At 12 months following PCI for CAD, 56.6% of patients adhered to healthy lifestyles with no significant difference between genders. Women were significantly more likely to be sedentary, not attend cardiac rehabilitation and smoke less. Women had smaller reductions in LDL and TG levels.

http://dx.doi.org/10.1016/j.hlc.2019.06.620

620 Gender Differences in Long-term Outcomes and Predictors of All-cause Mortality After Percutaneous Coronary Intervention in Australia

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**Introduction:** Gender disparities have been consistently reported in the presentation of coronary artery disease, leading to significant outcome differences. We investigated the effect of gender on mortality and whether predictors of mortality were different for men and women, using a multivariable logistic regression model.

**Methods:** We prospectively collected data on 10,988 PCI procedures from January 2009 to January 2019 from 12 Australian Hospitals, comparing baseline patient and procedural characteristics and 1-year clinical outcome by gender.

**Results:** The overall 1-year mortality rate was very low for both men and women, with women having a higher risk of death (19% vs 12%, P = 0.012). Predictors of increase mortality in men was significantly different from women. On a multivariable logistic regression model, previous heart failure (OR 2.43, 95% CI 1.14 to 5.1, P = 0.012), previous MI (OR 1.96, 95% CI 1.04 to 3.7, P = 0.036), and history of peripheral vascular disease (OR 2.46, 95% CI 1.21 to 4.97, P = 0.012) were associated with increase in mortality in men. PCI to the left main (OR 3.69, 95% CI 1.09 to 12.45, P = 0.035), and use of BMS vs DES (OR 0.45, 95% CI 0.25 to 0.82, P = 0.009) also increase mortality in men. In women no significant predictor was identified.

**Conclusion:** The difference in predictors of mortality in men and women does not explain the increase rate of death observed in women. Further research is needed to investigate the worse outcome in women.

http://dx.doi.org/10.1016/j.hlc.2019.06.621

621 Gender Differences in Optimal Medical Therapy Following Percutaneous Coronary Intervention for Myocardial Infarction

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**Background:** Prescription of optimal medical therapy (OMT) following myocardial infarction (MI) improves mortality. We evaluated if gender differences in OMT following percutaneous coronary intervention (PCI) for MI existed and their impact on total mortality.

**Methods:** From 2013-2016, consecutive patients treated with PCI for MI were entered into the Victorian Cardiac Outcomes Registry and followed for 30 days. The primary endpoint was discharge OMT defined as statin + dual antiplatelet therapy (DAPT) in patients with a left ventricular ejection fraction (LVEF) >44% and statin + DAPT + angiotensin-converting enzyme inhibitor + beta blocker in...
patients with a LVEF ≤44%. Multivariate logistic regression was used to analyse independent predictors of OMT and 30-day mortality.

**Results:** 12,901 patients (22.7% female) with ST elevation MI (STEMI, 48.7%) or non-STEMI (NSTEMI) underwent PCI. In patients with LVEF >44%, female gender was independently associated with lower OMT in both STEMI (91.6% vs 95.6%, p<0.001) and NSTEMI (92.0% vs 95.8%, p<0.001) cohorts. Females had lower rates of statin therapy within 30 days post-MI (95.2% vs 97.6%, p<0.001) cohorts. In patients with LVEF ≤44% there was no difference in rates of OMT between gender. Discharge OMT was independently associated with lower 30-day mortality (OR 0.30, p<0.001) in STEMI patients.

**Conclusions:** Female sex is independently associated with significantly lower rates of OMT in patients with LVEF >44% following MI. This difference was primarily driven by lower rates of statin therapy in women. OMT was independently associated with lower mortality in STEMI patients.

http://dx.doi.org/10.1016/j.hlc.2019.06.622

**622**

**Gender Differences in Percutaneous Coronary Intervention Practice and Outcomes in Australia: Results from a National Multicentre Outcomes Registry**

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**Background:** Gender differences are reported in presentation and outcomes in coronary artery disease and after percutaneous coronary intervention (PCI). Whether practice and long-term outcomes after PCI in Australia vary by gender is unknown.

**Methods:** We enrolled 10,986 patients undergoing PCI to 14,844 lesions in the Genesis HeartCare Outcomes Registry from November 2008-January 2018. Baseline patient/procedural data and 1-year outcomes were analysed with stratification by sex.

**Results:** Women were older (67.3 ± 10.5 vs 71.6 ± 10.3 years p<0.001), more likely to have hypertension (80.2% vs 71.9% p<0.001), heart failure (5.1% vs 2.9% p<0.001), chronic kidney disease (29.2% vs 20.5% p<0.001) and present with acute coronary syndromes but less likely to have smoked (31.5% vs 51.0% p<0.001) have prior PCI (28.8% vs 33.6% p<0.001), MI (19.5% vs 24.2% p<0.001), multivessel disease (37.4% vs 44.6% p<0.001). Procedural characteristics and outcomes varied by sex (Table)

**Conclusions:** Clinical presentation, PCI practice and outcomes vary between women and men in Australian private hospitals. Risk-adjusted 1-year mortality and MACE are similar for women and men however women are more likely to be rehospitalised after PCI.

http://dx.doi.org/10.1016/j.hlc.2019.06.623

**623**

**Gender Disparity in Secondary Prevention Medication and Outcomes Following Percutaneous Coronary Intervention for Acute Coronary Syndrome**

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**Background:** Women continue to receive suboptimal secondary prevention medications following acute coronary syndrome (ACS), however, impact on long-term outcomes are not well documented.

**Methods:** We analysed data on medical management 30-days post percutaneous coronary intervention for ACS in 20,976 consecutive patients in the Melbourne Interventional Group registry (2005-2018). Optimal medical therapy (OMT) was defined as 5 guideline-recommended medications, near-