| 129 |

PRESCRIBING MULTIPLE CLASSES OF EVIDENCE BASED PHARMACOTHERAPY IN THE COMMUNITY IS ASSOCIATED WITH LOWER MORTALITY

S A Al Suhaim, J L Lewsey, P S Jhund, J J V McMurray *University of Glasgow*

Background Prescribing of evidence based therapies (EBTs) reduces mortality in patients with cardiovascular disease. We aimed to describe the association between the prescription of EBTs for a first diagnosis of myocardial infarction (MI), angina or peripheral arterial disease (PAD) and mortality at 1 year.

Methods We conducted a retrospective cohort study using a linked database of primary and secondary care records covering 238 064 individuals (6% of the Scottish population). We identified patients with a first diagnosis of MI, angina, or PAD defined as a first hospitalisation or first recording of the diagnosis in primary or secondary care. We extracted data on the prescription of EBTs from primary care. Patients who died within the first 30 days were excluded. EBTs included ACE inhibitor/Angiotensin receptor blockers (ARBs), β-blockers, statins and antiplatelet agents; patients were categorised as prescribed no EBTs, one drug, two drugs and≥three drugs prescribed. Multivariable logistic regression was used to examine whether prescribing multiple classes of EBTs was associated with improving mortality.

Result Between 1997 and 2005, 4305 patients with a first diagnosis of MI, 7210 with angina, and 3385 with PAD had survived within 30 days after their first diagnosis. In comparison to those who were not prescribed EBTs, MI patients prescribed one drug were not significantly less likely to die (OR 1.05 95% CI 0.74 to 1.51); however patients prescribed two drugs (OR 0.56 95% CI 0.38 to 0.83) or ≥three drugs (OR 0.64 95% CI 0.46 to 0.90) were significantly less likely to die following a first diagnosis of MI (p=0.002). Similar trends were seen with angina—one drug (OR 0.86 95% CI 0.63 to 1.16), two drugs (OR 0.58 95% CI 0.40 to 0.0.84) and ≥three drugs (OR 0.44, 95% CI 0.28 to 0.67) (p=0.001). There was no significant corresponding association in those with PAD—one drug (OR 0.80, 95% CI 0.54 to 1.19), two drugs (OR 0.70, 95% CI 0.38 to 1.27) and ≥three drugs (OR 0.68, 95% CI 0.23 to 1.98) (p=0.49).

Conclusions The prescription of multiple classes of EBTs is associated with lower mortality in patients with a first diagnosis of MI and angina but not PAD. The greater number of drugs prescribed the greater the associated reduction in mortality. This fact was clearly observed in angina patients. These data highlight the need to ensure all patients receive appropriate EBTs.