Clinical reviews

Our panel of GPs review recent research papers in their specialist areas that may influence the way you practise

Reviewers

Addiction
Dr Jez Thompson
MB ChB MSc MRCGP
GPwSI substance misuse, Leeds, UK

Cardiovascular disease
Dr Peter Savill
BSc (Hons) MBBS PGDipCard
Former GP, Community Cardiology Specialist, Southampton and Mid Hampshire, UK

Diabetes
Dr Matthew Lockyer
MB BS DCH DRCOG DFFP MRCGP
Former GP with an interest in diabetes, Suffolk, UK

Mental health
Dr Phillip Bland
BA BM BCh MRCGP DRCOG
Former GP with an interest in mental health, Dalton-in-Furness, UK

Obstetrics and gynaecology
Dr Chris Barclay
MB ChB FRCOG
GP with an interest in O&G, Suffolk, UK

Paediatrics and allergy
Dr Peter Saul
MB ChB DCH DRCOG FRCGP
GP with an interest in paediatrics and allergy, Wrexham, Associate GP Dean N. Wales, Visiting Professor Glyndwr University, UK

Respiratory disease
Dr Peter Saul
MB ChB DCH DRCOG FRCGP
GP with an interest in respiratory disease, Wrexham, Associate GP Dean N. Wales, Visiting Professor Glyndwr University, UK

Sexual health
Dr Richard Ma
MRCGP DFSRH DCH DRCOG DipGUM DrPH
GP with an interest in sexual health and NIHR Research Fellow, Imperial College, London, UK

Smoking cessation
Dr Jez Thompson
MB ChB MSc MRCGP
GPwSI substance misuse, Leeds, UK

Cardiovascular disease

Sex differences identified in cardiovascular outcomes

Women who had survived a first coronary event had a significantly lower risk of major adverse cardiovascular events (MACE) and recurrent coronary heart disease (CHD) than men, a population-based cohort study has found. However, women had a higher risk of stroke, heart failure, and all-cause mortality compared with men.

Data were obtained from the Clinical Practice Research Datalink (CPRD GOLD) linked to hospital episode statistics and death records in the UK.

The investigators identified 143,702 adults (63,078 women) with incident CHD and no prior history of MACE between 1 January 1998 and 31 December 2017. The median age of the women was 73 compared with 66 years for the men.

Incident CHD included angina, myocardial infarction or coronary revascularisation. MACE was defined as a composite of recurrent CHD, stroke, peripheral vascular disease, heart failure and cardiovascular-related mortality.

The primary outcome was the first subsequent MACE after incident CHD and the secondary outcome was all-cause mortality.

The median follow-up period was 13.4 years. A first subsequent MACE was observed in 91,706 patients (63.8%); 55,087 men (68.3%) vs 36,619 women (58.1%). Most events occurred within two years of the incident CHD.

Multivariable models were used to assess the differences between the sexes.

After adjusting for confounding factors, women had a significantly lower risk of MACE and recurrent CHD compared with men.

- **MACE:** hazard ratio (HR) 0.68 (95% CI: 0.67-0.69)
- **Recurrent CHD:** HR 0.60 (95% CI: 0.59-0.61)

However, women had a significantly higher risk of any stroke, heart failure, and all-cause mortality, compared with men.

- **Stroke:** HR 1.26 (95% CI: 1.19-1.33)
- **Heart failure:** HR 1.09 (95% CI: 1.04-1.15)
- **All-cause mortality:** HR 1.05 (95% CI: 1.02-1.07)

The risk profiles of men and women differ when diagnosed with CHD and as this study has shown they fare differently after incident CHD.

The cause of these disparities relates to differences in the baseline cardiovascular profile, access to care, use of resources and evidence-based guidelines, and social as well as environmental factors, the study authors say.

They conclude: 'In this large population-based cohort study of patients with any type of incident CHD, we identified, after appropriate adjustments for confounders, a lower risk of MACE and recurrent CHD in women when compared with men. However, there was a higher risk of stroke, heart failure and all-cause mortality in women.'

'As more people are surviving their incident CHD events, further attention to all patients with incident CHD is needed to narrow this range of sex disparities in major subsequent clinical outcomes. Improving the standard and equity of care for women and men with incident CHD should recognise a 'one size fits all' approach may not hold,' they add.

DR PETER SAVILL

Akyea RK, Kontopantelis E, Kai J et al. Sex disparity in subsequent outcomes in survivors of coronary heart disease. *Heart* 2022;108:37-45