

HEART

Fall in UK cardiovascular disease toll not equal among all 4 countries or genders

Prevalence hasn't budged in 30 odd years, but drug and surgical treatments on the rise

UK deaths from heart disease and stroke have plummeted by almost 70% over the past 30 years, but these improvements have not been equally distributed among all four countries, or between men and women, finds an analysis of the available data, published online in the journal *Heart*.

Furthermore, the prevalence of cardiovascular disease hasn't budged during this period, but drug and surgical treatments have increased, particularly over the past decade, adding up to a "substantial burden" for the UK, say the researchers.

In a bid to gauge the overall burden of heart disease and stroke, the researchers examined information from national annual datasets to assess trends in deaths, ill health, and treatment for cardiovascular disease (CVD) as a whole, and individually for coronary heart disease (CHD) and stroke, from 1979 up to 2013.

They used data provided by the 2015 *Cardiovascular Disease Statistics* report published by the British Heart Foundation; the Quality and Outcomes Framework (QOF) incentive scheme for family doctors in England; the Health Surveys for England and Scotland; and the General Lifestyle Survey, an annual cross sectional survey for Great Britain, which ended in 2011.

They also scrutinised NHS data on hospital admissions.

Their analysis showed that, when standardised for age, deaths from CVD, CHD, and stroke fell by around 70% across the UK during this timeframe—with even larger declines in premature death before the age of 75, of around 80%.

The largest falls across all three indicators occurred in Northern Ireland, with premature CVD and CHD deaths among women falling by 83% and 87%, respectively, and premature stroke deaths among men plunging by 77%.

Overall, the prevalence of CVD hasn't budged, however, remaining at 3% in England, and 4% elsewhere. The prevalence of stroke hasn't changed either, staying put at 2%, although the data indicate that there has been an increase among the over 75s, and for men aged 65-74, and a small decrease among 45-64 year old women.

Trends in treatment reveal gender disparities. Across the UK admissions to hospital for CVD rose by 46,000 between 2010-11 and 2013-14, most of which (36,000) were among men.

During this period, admissions among men for coronary heart disease rose by almost 3000, but fell by around 5000 among women. And while admissions for stroke didn't change among men, they fell by 4500 among women.

Between 2005-6 and 2013-14, the overall number of admissions for CVD rose by 11% in England and by 15% in Wales. But the patterns for CHD and stroke were different.

In Wales, CHD admissions rose by 4%—almost entirely driven by those among men as these admissions fell by 6% among women. In England CHD admissions fell by 6%, overall, but the fall among women was 11% compared with 4% for men.

Admissions for stroke rose by 13% in England among men, but by 6% among women, while in Wales, stroke admissions rose by 7% among women but by 17% among men.

England topped the UK league table for drug prescriptions for diseases of the circulatory system, which includes CVD.

Between 1991 and 2014 these soared by 243 million—78%. Between 2005 and 2014 they rose by 5.5 million (23%) in Wales, by 2.3 million (9%) in Scotland, and by 2.5 million (28%) in Northern Ireland.

Surgical treatments also rose: seven times as many PCIs (percutaneous coronary interventions) were carried out in 2013 as in 1993, while there were a third fewer coronary artery bypass grafts in 2013 compared with the 1990s.

“Despite large reductions in mortality from CVD, CHD, and stroke, these conditions have remained a substantial burden to the UK, with rises in treatment and hospital admissions for all CVD,” conclude the researchers.

“There is some evidence that improvements have not occurred equally for men and women or between the countries of the UK,” they write, adding: “Although these are promising trends for mortality and stroke admissions in women, prevalence and treatment are increasing over time for all CVD and stroke.”

Notes for editors:

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