The Royal College of Pathologists
Pathology: the science behind the cure

The Royal College of Pathologists' response to the Men's Health Strategy for England: call for evidence July 2025

Improving Men's Health in Cardiovascular disease

In the setting of cardiovascular disease, the key priorities to improving heart health are diabetes mellitus, obesity (diet) and hypertension. All of these represent avoidable or modifiable risk factors for coronary artery disease and heart failure.

Behaviours

Men tend to access healthcare less and have a lower life expectancy.

Males have a lower life expectancy than females. Men are twice as likely as women to die prematurely from cardiovascular disease, lung cancer, liver disease and accidents, and 3 in 4 suicides are by men. The pandemic also exacerbated male mortality, as men were more likely than women to die from Covid-19. Although life expectancy is lower on average in poorer areas, deprivation has a greater impact on men: in the most deprived decile of local authorities, male life expectancy is 4.3 years shorter than female life expectancy, compared with 3.3 years in the least deprived decile. (King's Fund determinants of health June 2024.)

There is evidence that men are taking a more positive attitude to their heath and this trend needs to be improved.

Attitudes towards men's health are changing. More men are starting to take a proactive approach to their health, marking a positive shift. However, Deloitte found that 64% of men feel that stereotypes have affected their health behaviours and experiences in healthcare settings. When it comes to health, many still face significant barriers to seeking support, whether due to stigma, lack of awareness, or workplace culture.

Although men face higher rates of preventable health issues, they are less inclined to seek medical attention from their GP. Despite this reluctance, more men are taking a proactive approach to their own wellbeing since the pandemic. Almost 1 in 3 (30%) say their physical health is better than five years ago, and 28% say it's got better in the past year. (Westfield heath 2025)

Heart failure is an increasing health problem

Heart failure (HF) is a global pandemic affecting at least 26 million people worldwide and is increasing in prevalence. HF health expenditures are considerable and will increase dramatically with an ageing population. Despite the significant advances in therapies and prevention, mortality and morbidity are still high and quality of life poor. The prevalence, incidence, mortality and morbidity rates reported show geographic variations, depending on the different aetiologies and clinical characteristics observed among patients with HF.

Heart failure is a common and costly clinical syndrome, but it can be treated effectively. A rise in cardiovascular risk factors, improved survival from ischaemic heart disease, and population ageing have contributed to a sustained increase in prevalence. Recent analysis of primary care data in the United Kingdom found the absolute number of people living with heart failure increased by 23% between 2002 and 2014 from 750 125 to 920 616 (1.4% of the population). The global economic cost of heart failure is estimated at US$108bn (£82.4bn; €94.5bn) per year, comprising direct costs to healthcare systems and indirect costs to society through loss of productivity. The greatest expenditure is in the last three months of life. BMJ 2019 364.

Risk factors

Whilst coronary artery disease has been a major cause of heart failure, early recognition, intervention and the use of statins almost as a default in the over 60s has reduced the impact to some extent. There are other major risk factors which are known but are not addressed in the same way.

High blood pressure

When pressure in the blood vessels is too high, the heart has to pump harder to keep the blood moving. Over time, the heart's chambers can get larger and weaker, leading to heart failure.

Type 2 diabetes

People with diabetes tend to get high blood pressure and atherosclerosis from high cholesterol.

Metabolic syndrome

- Large waistline (abdominal obesity)
- High fasting triglycerides

- Low HDL (good) cholesterol
- High blood pressure
- High fasting blood sugar

Metabolic risk factors affect the heart and contribute to developing heart failure. (American Heart Association)

Although these are all risk factors for coronary artery disease, they are also independent risk factors for the development of heart failure. In clinical trials involving heart failure patients, sub group analysis for patients with diabetes show they do less well. Diabetic cardiomyopathy develops in those with poorer control and with evidence of other diabetes related complications such as retinopathy (eye involvement) and nephropathy (kidney involvement).

Hypertension

There is sexual dimorphism in hypertension prevalence, rate of development in hypertension and significant hazard ratios (HR) of incident CVD. Although hypertension remains more common in males, the gradient by which hypertension develops across the lifespan in females is steeper, while the blood pressure thresholds at which CVD develops are lower. (Curr Hypertension Rep (2022))

Hypertension places an increased workload on the heart. To pump harder, like other muscles, the heart works harder and hypertrophies and becomes thicker. This makes the heart wall stiff and difficult to fill with worsening (filling phase) of the heart which affects the right side of the heart. Whilst this can remodel and improve if the high blood pressure is treated, too often these change are fixed. Hypertension is more prevalent in men, particularly in younger age groups but there is no effective screening and by the time they are diagnosed changes are fixed. This requires earlier screening and treatment of hypertension to avoid long term problems.

Diabetes mellitus

The prevalence of type 2 diabetes mellitus is increasing in both sexes, but men are usually diagnosed at a younger age and lower body fat mass than women. Worldwide, an estimated 17.7 million more men than women have diabetes mellitus.

Literature reported sex differences in type 2 diabetes epidemiology: worldwide and in high-income countries, men display an approximately 1-3-1.5-fold higher prevalence of type 2 diabetes than women. In high-income Western countries in 2019, an age-standardised prevalence is of 7.3% in men and 5.3% in women, although women are predominant among youth-onset diabetic patients. (BMJ Public Health (2024))

An estimated 6.3 million people are at an increased risk of type 2 diabetes in the UK based on blood sugar levels. We estimate that 1.3 million people are currently living with type 2 diabetes but are yet to be diagnosed. This mean an estimated 12.1 million adults in the UK are living with diabetes or prediabetes. (Diabetes UK)

The global burden of disease report by the WHO concludes that type 2 diabetes continues to increase in prevalence, incidence, and as a leading cause of human suffering and deaths. Despite significant investments in clinical care, research, and public health interventions, there appears to be no sign of reduction in the rate of increase. Certain regions of the world, such as Western Europe and island states in the Pacific, are experiencing a disproportionately high burden. This epidemic will require an urgent and unwavering commitment to aggressive solutions at national levels with public policies, public health funding, and economic incentives for local communities to start diabetes prevention programs. Healthy eating options need to be subsidized, and unhealthy foods need to be taxed or otherwise disincentivized. Healthcare organizations and individual healthcare providers from multiple disciplines (doctors, nurses, pharmacists, dieticians, and diabetes educators) must be given time and resources to collaborate as they educate and care for individual and groups of patients. Unless urgent measures are instituted to reduce unhealthy eating, sedentary lifestyles, rapid urbanization, and other factors related to economic development, the burden of diabetes is expected to continue rising. (J Epidemiology Global Health 2020).

Diabetes mellitus is rising across the population in part due to increasing obesity. Again, whilst a risk factor for coronary artery disease, it affects the heart muscle, alters myocardial energy utilisation and trails of treatments for heart failure show, in sub-group analysis, that people with diabetes mellitus have worse outcomes. Poor control with other complications is associated with worse outcomes in relation to heart disease.

Better screening or prevention would reduce this health care burden which on current predications will be endemic by 20250.

Obesity

In 2022 to 2023, 64.0% of adults aged 18 years and over in England were estimated to be overweight or living with obesity. This is similar to 2021 to 2022 (63.8%) but there has been an upward trend since 2015 to 2016 (61.2%) (Figure 1). In 2022 to 2023 26.2% of adults were estimated to be living with obesity. This is similar to 2021 to 2022 (25.9%) but, as with the prevalence of overweight (including obesity), there has been an upward trend since 2015 to 2016 (22.6%). UK Gov Office for heath Improvement and disparities.

Incidence particularly of overweight was higher in men and in association with social deprivation. The date shows less physical activity and consumption of their “5 a day”.

Both hypertension and diabetes are associated with obesity, which is a significant problem in the population, particularly in men. However, independent of these obesity has an adverse effect on cardiac function through increased workload on the heart, fatty infiltration of the heart muscle, altered energy metabolism and an inflammatory milieu.

Conclusion

As a pathologist involved in heart disease both in the living and autopsy practice, it is clear that there is an increasing health burden driven by hypertension, diabetes mellitus and obesity which reduces life expectancy and productivity and places an increasing strain on the healthcare sector.

Whilst this extends across the adult population, the incidence of all these risk factors in total and on age adjusted basis is higher in men than women with a trend to an ever increasing early onset of disease and associated problems.

Contact details

This response was authored by Dr Martin Goddard, Cellular Pathology Sub-specialty Advisor for Cardiac Pathology, The Royal College of Pathologists.

Please contact Janine Aldridge, Public Affairs Officer at the College, if you have any questions on:

E: janine.aldridge@rcpath.org

T: 020 7451 6769

About the Royal College of Pathologists

The Royal College of Pathologists is a professional membership organisation with more than 11,000 fellows, affiliates and trainees, of which 23% are based outside of the UK. We are committed to setting and maintaining professional standards and promoting excellence in the teaching and practice of pathology, for the benefit of patients.

Our members include medically and veterinary qualified pathologists and clinical scientists in 17 different specialties, including cellular pathology, haematology, clinical biochemistry, medical microbiology and veterinary pathology.

The College works with pathologists at every stage of their career. We set curricula, organise training and run exams, publish clinical guidelines and best practice recommendations and provide continuing professional development. We engage a wide range of stakeholders to improve awareness and understanding of pathology and the vital role it plays in everybody's healthcare. Working with members, we run programmes to inspire the next generation to study science and join the profession.