ALL CARDIOVASCULAR DISEASES

What’s the issue?

“Cardiovascular disease (CVD) is a common condition caused by atherosclerosis (furring or stiffening of the walls of arteries). Although CVD may manifest itself differently in individual patients, CVD in practice represents a single family of diseases and conditions linked by common risk factors and the direct effect they have on CVD mortality and morbidity. These include coronary heart disease, stroke, hypertension, hypercholesterolemia, diabetes, chronic kidney disease, peripheral arterial disease and vascular dementia. Many people who have one CVD condition commonly suffer from another and yet opportunities to identify and manage these are often missed” [194]. Cardiovascular disease (CVD) affects the lives of millions of people and is one of the largest causes of death and disability in England. Significant improvements have been made in the prevention and treatment of CVD in the past ten to fifteen years following the publication of the National Service Frameworks for coronary heart disease, diabetes and renal services, and the National Stroke Strategy, with mortality rates in under 75 year olds falling by 40% [194]. In Hull for 2012-14, it is estimated that mortality from CVD is responsible for nearly one-quarter of the life expectancy gap between Hull and England (28.7% for men and 23.3% for women). Over the three year period, there would be 222 fewer male and 214 fewer female deaths and life expectancy would increase by 0.77 and 0.55 years for males and females respectively if Hull experienced the same CVD mortality rates as England [195].

“In some people, a high cholesterol concentration in the blood is caused by an inherited genetic defect known as familial hypercholesterolaemia (FH). Siblings and children of a person with FH have a 50% risk of inheriting the condition, and those with heterozygous (defective gene from one parent only) FH have a 50% risk of coronary heart disease (CHD) in men by the age of 50 years and at least 30% in women by the age of 60 years. The prevalence of heterozygous FH is estimated to be 1 in 500. Homozygous (defective gene from both parents) FH is rare with around one case per million, but symptoms appear in childhood and is associated with early death from CHD” [196]. FH also increases the risk of other CVD [196].

What’s our situation?

Between 2008/09 and 2010/11 there were 8,296 admissions into hospital for cardiovascular diseases among Hull men, and 6,498 among Hull women, that is 2,765 men and 2,166 women per year or 7.5 men and almost 6 women per day. The admissions rate was highest among those living in the most deprived fifth of areas of the city (199 per 100,000 residents), lowest amongst those living in the least deprived fifth of areas (134 per 100,000 residents) [197]. In 2013-15, the under 75 directly standardised mortality rate (DSR) for all cardiovascular diseases was 151 per 100,000 men and 66 per 100,000 women, having decreased by 46% since 2001-03. There were 1,980 deaths in Hull from cardiovascular disease over the three year period 2013-15 [83], of which 603 occurred prior to the age of 75 years [83], and 398 of these premature deaths were considered preventable [26, 77, 82]. The DSR for cardiovascular diseases that were considered preventable was 71 per 100,000 population (104 for men and 40 for women per 100,000 population).

The change over time (from 2001-03 to 2013-15) was very similar for both premature and preventable mortality among both males and females (40% reduction). However, whilst the national and local inequalities gap had reduced, mortality rates in Hull compared to England were 44% higher for premature mortality for both men and women, and 43% higher for men and 58% higher for women for preventable mortality [26, 77, 78, 82]. The national inequalities gap had reduced more for men than for women, but the reverse was true for the local inequalities gap.

For more detailed information, see the JSNA Toolkit: All Circulatory Disease report.
What are the strategic needs?

It is necessary to work together to ensure people understand the benefit of positive life choices and know how to access information and seek early support to change. People need to know that stopping smoking has immediate health effects [110, 111] with substantial reductions in the risk of heart disease and stroke occurring within 1-5 years [112, 113].

People aged 40-79 years who are eligible for the NHS Health Check should be encouraged to attend, and those who have already been diagnosed with a cardiovascular disease should attend their annual reviews so that they get the best on-going treatment for their condition in order to minimise the likelihood of a further cardiovascular event.

The local NHS Hull Clinical Commissioning Group’s Cardiovascular Disease Outcomes Strategy details local on-going programmes and work areas to reduce CVD and its effects in relation to integrated care, prevention and risk management, improving acute care, improving and enhancing case finding in primary care, better identification of very high risk families and individuals, and better early management and secondary prevention in the community [194]. Testing children by age 10 is recommended for those with parents with confirmed FH, and a cascade approach is recommended to detect FH among first- and second- and, where possible, third-degree biological relatives of confirmed index FH individuals [196].

References