

CHD on the increase again: fact or fiction?

Prof Eoin O'Brien, President of the Irish Heart Foundation, reveals some worrying statistics on coronary heart disease

MORE people still die of cardiovascular disease (CVD) — high blood pressure, coronary heart disease, strokes and arterial disease — every year in Ireland than from any other cause. It kills more people than cancer, suicide and road accidents combined. However, the numbers dying from heart disease have been decreasing steadily over the past 20 years.

In 2006 there were 3,700 fewer deaths from heart attack than in 1984. But is this gratifying trend in the hard-fought

battle against cardiovascular disease at an end?

This may be so if the most recent provisional figures from the Central Statistics Office (CSO) are representative of an overall change. Between January and March 2007, 2,937 people died from cardiovascular disease, compared to 2,665 in the first quarter of 2006 — an alarming 10 per cent increase in mortality.

The optimist will take solace from the fact this may be just a statistical aberration. As the CSO warns, recent changes in coding call for caution when

comparing quarterly statistics and may mask the true picture until the annual figures are compiled. However, there are ominous warnings coming from the UK and the US, where similar trends have emerged.

UK statistics

A recent survey in the UK was particularly disturbing. It showed that as in Ireland, mortality rates from coronary heart disease (CHD) have continued to decline steadily since the late 1960s, which is not to deny the fact that CHD remains the leading cause of

death and exacts a heavy social and economic toll.

What is worrying about these UK statistics is that previous reductions in age-specific mortality rates seem to be levelling off in men and women aged under 55 years, but mortality rates in older adults continue to decline.

This trend is occurring despite the increasing use of evidence-based treatments such as angioplasty, thrombolysis and ACE inhibitors. The explanation is not difficult to find: between 1993 and 2003, some of the largest relative increases



in obesity and diabetes have occurred among adults aged 45 years; mean concentrations of cholesterol have fallen little or even increased among some of the younger age groups; and the previous decline in smoking rates is evening out among young adults, with the smallest reduction seen in men aged 25 to 34. Material deprivation may be an additional risk factor in younger adults, especially among the immigrant population.

It is not surprising, therefore, to expect to see adverse trends in CHD mortality rates appearing first among young adults.

US statistics

Similar trends, though not so marked, are also evident in US statistics. In a 123-page report in 2004, the American Heart Association showed that the age-adjusted CVD death rate per 100,000 persons in the US was 288, compared with 307.7 in 2003. So, in the US the decline in mortality continues, but CVD prevails as the number one cause of death — it was listed as the underlying cause in 869,724 deaths, compared with 911,163 deaths in 2003.

Cancer was the second leading cause, and stroke was the third, when considered separately from CVD. Meanwhile, coronary heart disease was still by far the nation's single leading cause of death (451,326 deaths in 2004). However welcome the small decline in CVD mortality may be, the prevalence of many risk factors is increasing.

Among adults, 66 per cent are now overweight while 31.4 per cent are obese. Among children and adolescents aged 12 to 19, 17 per cent are overweight (up from 6.1 per cent in 1971 to 1974), as are 17.5 per cent of six- to 11-year-olds (up from 4.0 per cent). And even in the two- to five-year-old age range, 14 per cent of children are overweight.

One-and-a-half million new cases of diabetes were diagnosed in people over the age of 20 in one year, and it is projected that diabetes prevalence will more than double from 2005 to 2050.

A major factor in this epidemic is poor diet. The report showed that fewer than one in three adults in the US eats fruit two or more times a day and just under 30 per cent eat vegetables three or more times a day.

Finally, smoking — which raises the risk of CHD by two to three times — is still very prevalent, with 46 million Americans still smoking. How-

ever, what the American Heart Association report fails to show is that, as in the UK, the estimated annual percentage decrease in mortality from CHD accelerated among younger women and men in more recent years compared with earlier periods, leading again to the conclusion that the unfavourable trends in several risk factors noted was accountable for this phenomenon.

Mortality vs morbidity

It is one thing to look at the trends in mortality statistics, but this should not blind us to the fact that in the UK and US, non-fatal events such as stroke and heart failure, are on the increase, mainly because of increased longevity.

Approximately 10,000 acute strokes are admitted to hospital in Ireland each year and for those who survive — some 30,000 people — only half make a complete recovery, leaving the remainder with the problems of coping with serious disability and in need of support to cope with the activities of daily life.

High blood pressure — the major determinant of stroke — affects over a third of the adult population and this figure doubles after the age of 60 years.

One of the most worthwhile initiatives to reverse the growing epidemic of stroke and heart attack in an aging society will be the control of high blood pressure, which has the potential to reduce stroke by over 50 per cent.

So what can we, as practising doctors, do to combat what is clearly a rising cardiovascular epidemic of which we are seeing only the tip of the iceberg?

We need to alert our patients to the dangers:

- By giving appropriate lifestyle advice;
- By encouraging our patients to know their numbers — weight, blood pressure, total and LDL cholesterol and blood sugar — and to know what the normal levels are; and
- We need to be active in treating patients at the first sign of cardiovascular disease so as to avert the onset of stroke, heart attack and heart failure.

There is a limit, however, to what doctors can do — the healthcare providers must acknowledge the omens and act urgently. ■

References on request

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