

CVD at the heart of efforts in prevention

John Cox

The high prevalence of cardiovascular disease (CVD) in Ireland has been the focus of much attention and study in our academic institutions for years. As a medical student at University College, Dublin in the early 1970s, I was particularly impressed by Professor Risteard Mulcahy and the emphasis he put on the importance of prevention in the management of CVD. He lectured us about the Framingham Heart Study which had been set up in Massachusetts in 1948. We heard how, over the years, careful monitoring of this population had led to the identification of the major CVD risk factors, namely high blood pressure, high cholesterol, smoking, obesity, diabetes, physical activity, age, gender, and psycho-social issues. This study, which produced approximately 1,200 articles in leading medical journals, established a concept of CVD risk factors which had become an integral part of our medical curriculum at that time. I subsequently had the privilege of attending a lecture by Professor W. B. Kannel, an impressive speaker and principal author of the Framingham Study, at a conference in Switzerland in the early 1980s.

The clinical review committee

The Irish College of General Practitioners, since its foundation in 1984, has recognised the extent to which these

risk factors related to CVD prevalence in this country. In June 1990, the clinical review committee, under the chairmanship of Michael Coughlan, was established by the ICGP to provide guidelines for general practitioners on the management of a number of chronic illnesses. I was invited to chair a task force on the prevention of CVD which had been set up by the clinical review committee. This task force was given the remit to draw up a set of guidelines on the diagnosis and management of hyperlipidaemia in general practice.

Task force on the prevention of CVD

We carried out an extensive review of the literature available at the time and met on three occasions. Within the task force a wide range of views existed on the extent to which specific risk factors had been shown at that time to have been conclusively related to the incidences and prevalence of CVD. While the majority of the group agreed that the incidence of this disease could be addressed through risk factor modification, Professor James McCormick and Petr Skrabanek dissented. Notwithstanding, the publication of the document 'Guidelines on the diagnosis and management of hyperlipidaemia in general practice' went ahead in August 1991 and for several years became the main guideline for general practitioners working in this area.

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The first European Task Force Guideline

Three years later saw the publication of the first European Task Force Guideline on the prevention of coronary artery disease in 1994. Emphasis was placed in that publication on the fact that coronary artery disease was usually the product of multiple risk factors. Risk charts that attempted to simplify the estimation of total or global risk were an important innovation in this report and went on to be adopted by the ICGP and circulated to its members. It was decided by the members of the task force at that stage that the ICGP would adopt the European Task Force Guideline rather than trying to put together its own guidelines in this area.

The second European Task Force Guideline in 1998

The latter part of the 1990s saw the emergence of new

scientific evidence in both secondary and primary CVD prevention, particularly in relation to lipid-lowering, leading to the publication of the second European Task Force Guideline in 1998. The European Task Force at this stage included representatives from behavioural medicine, primary care and the European Heart Network.

This report set new lifestyle risk factor and therapeutic goals in prevention. It also had a major influence on the Department of Health and Children report of the Cardiovascular Health Strategy Group, ‘Building healthier hearts’ which had also received a very detailed submission in the area of CVD prevention from the ICGP and was published in 1999. Thus recommendation R6.7 from that report recommended that “the European Society of Cardiology’s



priorities for the prevention of CVD in clinical practice be adopted within the health services in Ireland.”

The Heartwatch Programme

The goals of the second European Task Force Guideline form the basis for the targets of the Heartwatch Programme. The Heartwatch Programme is the national programme in general practice for the secondary prevention of cardiovascular disease in Ireland.

It has been agreed by the Department of Health and Children, the HSE and the ICGP in collaboration with the Irish Heart Foundation with the objective of implementing the secondary care recommendations of the Cardiovascular Strategy Group report ‘Building healthier hearts’.

The Heartwatch Programme has been running in Irish general practices since September 2002. The first patients were seen in March 2003. It is funded for 20% of the population and involves 460 general practitioners throughout Ireland. The programme implements continuing care including secondary prevention of patients who have had a myocardial infarction, coronary artery bypass graft or percutaneous transluminal angioplasty.

Diabetes patients from the HSE Midlands Area Diabetes Structured Care Programme are also included under the Heartwatch programme.

Data on 90% of patients and quarterly continuing care visits as per the protocol are sent electronically from the practice to an independent data centre established specifically for the programme.

Heartwatch is now in its seventh year and has well established infrastructures in place. GP co-ordinators and nurse facilitators are based in each of the HSE areas and provide assistance to each Heartwatch practice on a local regional level which is coordinated from the national programme centre.

Over 12,800 patients have been recruited. Statistically significant changes in the levels of the three main risk factors, namely smoking status, blood pressure and cholesterol levels have been reported.

Interestingly, little or no improvements were shown for exercise, body mass index or waist circumference. Increases were noted in the prescribing of statins, ACE inhibitors and beta blockers over the course of the study.

Epidemiological modelling estimated that 81 deaths were prevented or postponed, and 522 life years gained over two years of the programme.

The Heartwatch programme has demonstrated significant improvements in the main risk factors and treatments for CVD. More effective interventions are required to reduce body mass index weight circumference and physical activity in this population. It is also worth noting that increases in treatment uptake are approaching the optimum levels for this group.

Heartwatch was certainly a major undertaking and definitely benefited the patients of the practices involved. Unfortunately it was never rolled out to include more than 20% of the population, which in my opinion is a major drawback.

On a personal note I would say that my involvement with the college has been a very satisfying time for me. I started as a student hearing about the important associations between risk factors and CVD. I then found myself in a position to influence the drawing up of guidelines in this area.

Later, as a GP co-ordinator for Heartwatch, I found myself to be part of a major intervention in risk factor modification which has reduced death from CVD and improved longevity and quality of life of my patients.

The ICGP is indeed to be complimented in its foresight and interest in this work. I wish the college all the best for the next 25 years in this area.