

# Cardiovascular risk factor control in Australia



## *Current status and implications for the future*

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Over the past 30 years there has been a major decline in coronary heart disease (CHD) and stroke rates in Australia. These have been attributed to a number of factors including reduction in smoking, improved survival following myocardial infarction, and improvements in acute and chronic medical management of patients with cardiovascular disease (CVD)<sup>1</sup> (Figure 1). Despite this impressive reduction, CVD is still the major cause of death and disability in Australia, and heart failure and peripheral vascular disease are now becoming more prevalent. In 2002, CVD killed 50 294 Australians, more deaths than for any other disease group.<sup>1</sup> It is estimated that CVD costs the community about \$7 billion per year in direct hospital, medical and pharmaceutical costs, and accounts for 11% of all health care expenditure.<sup>2</sup>

### Current CVD risk factor status

Australia does not have a systematic risk factor surveillance system – most recent estimates are derived from the AusDiab study and the self reported National Health Survey.<sup>3,4</sup>

Smoking rates in Australia have declined by 21% in males and 16% in females over the past decade<sup>1</sup>. However, against this trend, younger women (aged <25 years) are smoking more.

The rates of high blood pressure (BP) are estimated to be 30%, which represents a significant fall in prevalence since the

1980s. Higher detection rates and increased use of prescription antihypertensives have contributed to this reduction. Blood cholesterol concentrations do not appear to have changed over the past 10 years despite the increasing use of lipid lowering agents.<sup>1</sup>

Of concern is the increased rate of other modifiable risk factors.<sup>1</sup> The AusDiab study estimated the prevalence of overweight and obesity has doubled over the past 20 years,<sup>3</sup> with an estimated 7.42 million Australians (60%) now falling into these categories. In parallel with the increasing obesity is the decreasing rates of physical activity, with an estimated 54% of the population not participating in sufficient regular physical activity to derive health benefits.<sup>1</sup> In association with this has been an increase in the prevalence of diabetes with an estimated population prevalence in the order of 8%.<sup>5</sup>

While individually these risk factors are of concern, it has been well established that the interactive effect of multiple risk factors is a stronger predictor of disease.<sup>6</sup> For Australian men and women aged over 18 years, more than 90% have at least one risk factor, and three in 4 have two or more risk factors<sup>7</sup> (Figure 2). Risk factor 'clustering' occurs in particular groups, including Aboriginal and Torres Strait Islander peoples, the elderly, those with diabetes, and those in the lower socioeconomic groups.<sup>7</sup> The importance of social determinants such as economic resources, education, living and

working conditions, social support, and access to health care and social services is recognised as a major factor contributing to population risk factor levels and CVD rates.<sup>8</sup>

### Prospects for CVD prevention

Although heredity can be a major factor for some people, personal health habits and environmental/cultural exposure are more important factors in the risk of developing or dying from CVD.<sup>9</sup> Recent data from 52 countries suggest that abnormal lipids, smoking, hypertension, diabetes, abdominal obesity, psychosocial factors, low consumption of fruits and vegetables, excess alcohol, and physical inactivity account for over 90% of the risk of myocardial infarction, in both sexes, worldwide.<sup>10</sup>

Clearly, primary prevention of CVD and the associated risk factors is the cornerstone of an integrated approach to disease management. Effective combined lifestyle measures (especially for primary prevention) and medical treatments (especially for acute treatments and secondary prevention) should decrease CHD events by around 37% and 47% respectively.<sup>9</sup>

In recent years there has been recognition of a 'common agenda' approach to prevention.<sup>11</sup> The value of CVD prevention by risk factor programs is amplified because of the concurrent impact on other diseases, eg. effects of tobacco control on cancers

and lung disease, and of physical activity on diabetes and asthma.

### Role of the GP

General practitioners have a central role in the prevention, detection and management of cardiovascular risk factors. Data from the BEACH study has identified cardiovascular problems as a major reason for general practice encounters at a rate of 20.5 cardiovascular problems per 100 encounters (see BEACH article this issue). Risk factor management was initiated in over 70% of these encounters and prescribing medication was the most common treatment.<sup>12</sup>

Although preventive activities are being undertaken in general practice, performance of these activities may be less than the ideal. A cross sectional study in Queensland, suggested that during a consultation doctors identified 66% of self reported smokers, 40% of heavy drinkers, and 59% of overweight patients.<sup>13</sup> Screening and/or counselling of patients in the consultation was highest for BP (47%) and smoking (34%), and considerably lower for overweight (22%),

alcohol (19%), and cholesterol (6%). In addition, there still appears to be a ‘treatment gap’ in cardiovascular management.<sup>14</sup>

Barriers to the provision of cardiovascular health promotion in the general practice setting have been explored and identified as time pressure, lack of training for GPs in effective health promotion and prevention strategies, and lack of confidence by GPs that preventive interventions will be successful.<sup>15</sup> Add to these patient barriers, financial barriers and unstructured links with community based services and it is not surprising that preventive activities remain in the shadows for most.

### Future strategies

Undoubtedly, there have been major advances in cardiovascular risk factor management in the past few decades. However, in the face of a burgeoning epidemic in obesity and physical inactivity across all age groups, there clearly needs to be major consideration given to addressing the barriers limiting the role of the GP in promoting prevention.

Appropriate remuneration for time devoted to cardiovascular prevention is a key area in association with the implementation of programs to enhance the evidence based clinical guidelines for the assessment and management of risk factors into routine practice.<sup>16</sup> This could include the requirement of expertise in risk factor management through training and certification linked to funding. In addition, endorsement of model programs for risk factor management that have been shown to be effective, including those utilising allied health professionals such as practice nurses, may be valuable. The promotion of risk factor management as a key indicator of the level of care in quality assurance programs could be considered.

The future for cardiovascular risk factor control in Australia needs to focus on optimising the use of therapeutic agents for risk factor reduction and promoting prevention programs. Major effort needs to be focussed on structural changes in general practice enabling prevention strategies directed toward lifestyle change to be recognised as a worthwhile investment.

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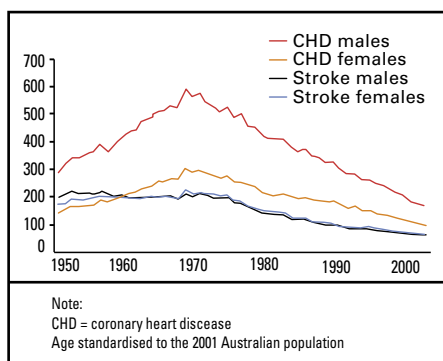


Figure 1. Death rates from CHD and stroke, 1950–2002<sup>1</sup>

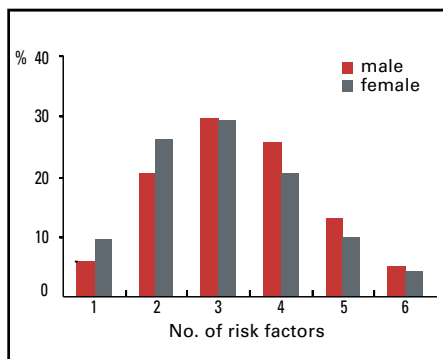


Figure 2. Multiple risk factor prevalence in Australia<sup>7</sup>