

Physical activity is important, but can it be promoted in general practice?

The multisector approach to reducing smoking may be a good model for tackling physical activity

OVER THE PAST YEAR, the signals that physical activity is a critical community issue in Australia have become overwhelming. The increasing obesity of Australians has attracted the attention of our politicians and spawned obesity summits in New South Wales and Victoria; these both recognised that the energy expenditure imbalance (physical activity versus diet) is key to the obesity epidemic.¹

Related to obesity is an inexorable increase in the prevalence of type 2 diabetes. The recent seminal Diabetes Prevention Program trial demonstrated that physical activity and dietary modification are effective lifestyle strategies for curbing this problem.² In the area of cancer control, a notable event in the past year was the Eat and Run Conference hosted by the New South Wales Cancer Council, where evidence was presented that regular physical activity contributes to preventing colon and breast cancer.³ The past year has also seen reports that reinforce the benefits of regular physical activity in preventing coronary heart disease⁴ and falls in the elderly,⁵ and in reducing depression.⁶ Thus, physical activity is a pivotal public health issue, contributing to the prevention and management of at least six of Australia's seven current national health priorities: cardiovascular disease, cancer, mental health, diabetes, injury and musculoskeletal problems.

However, the prevalence of inactivity in our communities is high and increasing. In 2000, 42% of Australian men and 44% of women did not partake in the levels of physical activity recommended by the National Physical Activity Guidelines (30 minutes of moderate-intensity activity, accumulated in bouts as short as 10 minutes, on most days of the week, or 20 minutes of vigorous-intensity activity on at least three days).⁷ These data revealed an increase in the prevalence of inactivity from 1997, when it was 37% among men and 39% among women.⁷

Over the past decade, there have been numerous calls for general practitioners to address physical activity and other behavioural risk factors. Along with these calls have come an increasing number of studies evaluating physical-activity interventions delivered in primary care. The National Institute of Clinical Studies (NICS) in Australia funded a systematic review of published studies, which was completed late in 2002 and included 20 studies.⁸ While most interventions entailed verbal advice and written information materials, they differed in scope (some targeting physical activity only, others addressing multiple risk factors); intensity (brief advice through to more intensive counselling with multiple contacts); method of delivery (physicians, nurses, health educators or exercise scientists); and target audience (all adults, older people only, interested volunteers or whole patient populations). The review concluded that there is evidence that interventions in primary care can increase physical activity in the short

term. Notably, brief interventions appeared to be as likely to succeed as intensive interventions, although there was insufficient evidence to identify other attributes of successful interventions.

The NICS review is one of several recent reviews that support the contribution that GP interventions can make to promoting physical activity.^{9,10} A notable dissenting opinion came from the recent United States Preventive Services Task Force review of clinician counselling to promote physical activity,¹¹ but this review included only eight studies published since 1994. Overall, the level of supporting evidence for GP interventions offers encouragement. However, much still needs to be done to promote greater attention to physical activity in general practice, given that lack of time and a perceived lack of patient interest are major barriers reported by GPs.¹²

The NICS review offers a practical way forward in light of these barriers. It recommended brief physical-activity interventions specifically for patients with risk factors or health conditions that could be modified by increased activity. This approach should not require a major investment of time from already busy GPs and, by directing interventions to patients with current health problems that could be alleviated by physical activity, is more likely to be well received by patients.

Despite the growing evidence about general practice-based physical-activity counselling, until recently there had been no efforts to disseminate intervention materials or protocols for GPs to use. However, agencies like the National Heart Foundation and the Victorian Council on Physical Activity and Health have been working with health authorities in several states to develop tools to help GPs to promote physical activity. An example of these is the Active Prescription protocol disseminated by the National Heart Foundation in NSW.¹³ It provides a format for delivering brief advice to patients about physical activity and also serves as a written record of this advice for doctors and patients. An electronic version has been included in the latest version of the *Medical Director* clinical management software (Health Communication Network, Sydney, NSW). These efforts are promising and require continued support, together with continued research on the effectiveness of the interventions, as well as dissemination strategies.

Numerous social and environmental factors lead to physical inactivity in Australia. Thus, addressing this public health priority will require the sustained involvement of a range of sectors in addition to primary healthcare (eg, transport, urban development, education, sport and recreation). We can look to the past three decades of efforts to reduce smoking as an example of an integrated, multisector approach that has significantly reduced population levels of

smoking. As with smoking, GPs — the preferred source of health information for most Australians — have a key role to play in promoting physical activity.

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Cardiovascular disease in the Asia–Pacific region: challenges for health research and policy

Risk factors and diseases in developing countries are becoming “westernised”

CARDIOVASCULAR DISEASE is usually considered to be the scourge of wealthy countries. However, the recent *World health report*¹ draws attention to the increasing importance of cardiovascular disease in developing countries. The report identifies principal risk factors and diseases in regions of the world divided into three categories: developed countries, developing countries with low mortality rates, and developing countries with high mortality rates.

It is no surprise that the leading risk factors contributing to disease, disability and death in developed countries are tobacco consumption, high blood pressure, high cholesterol level, overweight, low fruit and vegetable intake, and physical inactivity (Box 1). Coronary heart disease is the leading cause of death and disability, and stroke ranks third.

In developing countries with high mortality rates (eg, Nepal, Myanmar, the Maldives and numerous African countries), factors such as underweight and unsafe sexual practice are more important than risk factors for non-communicable diseases. Nevertheless, tobacco consumption, high blood pressure and high cholesterol levels are still responsible for substantial morbidity and mortality (Box 1). The five leading causes of death and disability in these countries are HIV/AIDS, lower respiratory tract infections, diarrhoeal diseases, childhood diseases and low birthweight — coronary heart disease ranks eighth.

Countries between these two extremes have rapidly changing profiles. In these low-mortality developing countries (eg, Cambodia, China, and Fiji), “developed country”

factors have already outstripped traditional “developing country” factors in terms of importance for overall disease, disability and death (Box 1). In these countries, the juxtaposition of underweight with overweight as the fourth and fifth leading risk factors, respectively, starkly exemplifies the “double burden of disease” they carry. Following an upsurge in “developed country” risk factors in these countries, stroke is now the second most important cause of disability and death, and coronary heart disease the sixth.

Unfortunately, the health services of low-mortality developing countries have not been able to adjust quickly enough to these changing disease profiles. The lack of epidemiological data on diseases and risk factors has hampered appropriate health service development and responses. A number of Australian organisations, including the Institute for International Health (IIH) at the University of Sydney,² are trying to address these issues, with a focus on our neighbours in Asia and the Pacific region. The IIH has recently introduced initiatives, involving data collection and analysis, as well as technology transfer and capacity development, with partners in China, India and Thailand.^{3,4} The IIH has also worked with Asia–Pacific partners in multicentre trials and epidemiological studies, including the Asia Pacific Cohort Studies Collaboration (APCSC).

The APCSC is a collaborative project that seeks to pool data from existing longitudinal studies with information on cardiovascular disease in the region. The project database now has data on 659 000 adults in eight countries (Box 2),