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Physical Activity: the best buy in public health - but most undervalued

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There is overwhelming evidence that regular physical activity has important and wide-ranging health benefits. These range from reduced risk of chronic diseases such as heart disease, type 2 diabetes, and some cancers to enhanced function and preservation of function with age. There is also strong emerging evidence that activity delays cognitive decline and is good for brain health as well as having extensive benefits for the rest of the body.¹ The earliest studies of the protective value of physical activity were undertaken in the 1950s and compared bus drivers with bus conductors and postmen with desk-based workers in the postal service.²

In 1994 Morris made a convincing argument that physical activity was the best buy in public health. This argument was based on the high prevalence of physical inactivity (for example, twice as many people are inactive compared to the number who smoke) and a relative risk for Coronary Heart Disease, for those who are inactive, that is similar in magnitude to that of smoking, high levels of cholesterol or hypertension.³ The Chief Medical Officer has since commented that physical activity must be one of the most undervalued interventions to improve public health.⁴

Due to the low levels of physical activity in the population moderate intensity activities are most suitable rather than more vigorous activities. Moreover, habitualising physical activity into everyday living is seen as key to building up fitness levels in the population and reducing risk of ill-health and premature death. In terms of how this may best be achieved, in his 2004 report on physical activity, the Chief Medical Officer noted that:

“For most people, the easiest and most acceptable forms of physical activity are those that can be incorporated into everyday life. Examples include walking or cycling instead of driving, and taking up active hobbies and leisure pursuits such as gardening and social sporting activities.”⁵

There is a dose-response curve⁶ to physical activity which, simply put, means that the greatest health benefits are achieved when the least active undertake some physical activity but all who participate in physical activity improve their health. Thus, there is a significant role for transport planning through the provision of walking and cycling-friendly infrastructure and behaviour change programmes to help raise total physical activity levels and so contribute to overall public health.

1 Blair, S. 2009 Physical inactivity: the biggest public health problem of the 21st century, *British Journal of Sports Medicine*, 43: 1-2.

2 Morris, J. et al, 1953 Coronary heart disease and physical activity at work, *Lancet*, 2: 1111-1120.

3 Morris J., 1994 The role of exercise in the prevention of coronary heart disease: today's best buy in public health. *Medicine Science Sports Exercise*, 26:807-13.

4 Donaldson, L. 2000 Sport and exercise: the public health challenge, *British Journal of Sports Medicine*, 24: 409-410.

5 Department of Health, 2004 *At least five a week. Evidence on the impact of physical activity and its relationship to health. A report from the Chief Medical Officer*. London: Dept. Health.

6 Pate., R. et al., 1995 Physical activity and public health: A recommendation from the Centre of Disease Control and Prevention and the American College of Sports Medicine. *Journal of the American Medical Association*, 273: 402-408.