

## The social patterning of exercise behaviours: the role of personal and local resources

The “inverse care law”—that is, those most in need of services are least well provided with them—is well known as it applies to health care.<sup>1</sup> It may, however, be less often considered in relation to local provision for health promoting activities. Much health promotion advice focuses on individuals, and exhorts them to engage in better personal habits, or to encourage their children to do so. It is often noted that such messages are differentially taken up by different social class groups; better off and better educated people are more likely to modify their diets, give up smoking, improve dental hygiene practices, and take up healthy physical activities than are poorer and less well educated people.<sup>2</sup> The lower take up of healthy behaviours among lower social class groups is often considered to contribute to their poorer health and mortality experiences, although such health behaviours do not in fact completely explain social class gradients in morbidity or mortality.<sup>3</sup> It is often assumed that the barriers to the take up of health promotion messages lie in personal factors such as lack of motivation, fatalism or short termism, or lack of personal resources such as money, time, equipment, or knowledge. However, “the inverse care law” may apply to opportunities to take up health promoting messages as much as it does to the provision of health care.

Since 1987, we have been studying socially contrasting localities in Glasgow City, Scotland. As well as looking at residents in different age groups (teenagers and adults in early and later middle life), we have been directly measuring socially structured features of the local social and physical environment that might enhance or inhibit people’s opportunities to be healthy or live healthy lives.<sup>4</sup> As part of this study, we have examined, among other things, primary care provision, social work provision, public transport, the price and availability of healthy foods, retail shopping services, crime rates, perceptions of “incivilities” in the local environment, community groups, and facilities for physical recreation.<sup>4,5</sup> In the case of all these features of the local environment, we have found a pattern that we call “deprivation amplification”—that is, in places where people are poorer, iller, and have fewer personal resources such as money or private transport, local facilities that may enable people to lead healthy lives are also poorer. In the case of physical activity, for instance, in our more socially deprived area, we found the following: there were fewer formal resources for healthy physical recreation—for example, bowling greens, tennis courts, sports centres; fewer residents had access to cars, and public transport was sparser and less frequent, and thus it was harder for people to travel elsewhere to use such facilities; there were fewer safe open green spaces where people could walk, jog, or take their children to play; children’s playgrounds were less attractive and safe; and there were more perceived threats in the immediate environment (for example, graffiti, litter, discarded injection equipment, risk of assaults and muggings, disturbances from youths) which were likely to deter people from walking or cycling around in the local area, or letting their children play outside.<sup>6</sup> Perhaps not surprisingly, residents in this area were less likely to engage in physical activity than were those in better provided for areas.<sup>7,8</sup>

Recent United Kingdom policies on public health give high priority to reducing inequalities in health, and in common with earlier such policies,<sup>9,10</sup> also prioritise

improvement in health related behaviours such as increasing physical activity. The English white paper, *Saving lives: our healthier nation*, states that the government will build on many existing initiatives including “wide-ranging and affordable sports and leisure opportunities at local neighbourhood level”.<sup>11</sup> However, the currently inequitable distribution of such opportunities is not discussed (although the inequitable distribution of food outlets is discussed on the next page). The Scottish white paper, *Towards a healthier Scotland*, states that the government will set up a task force to develop a national physical activity strategy for Scotland, and set targets for increasing physical activity among young people and adults.<sup>12</sup> However, although an overarching priority is to tackle inequalities, no targets are given for improved life circumstances that may enhance people’s ability to engage in more physical activity. Indeed a key feature of the Scottish white paper is that, although targets are set for lifestyles and health topics, no targets are set for improvements in life circumstances despite these being seen as key determinants of lifestyles and of morbidity and mortality.<sup>12</sup> Although there are difficulties in setting targets for the reduction in inequalities in health because of the potentially long time lag between life circumstances and health consequences, there seems no reason why there should not be targets for the reduction of inequitable life circumstances that are known to influence health outcomes. Thus the government could have taken the opportunity to set targets for every community of certain size (in terms of either area or population) to have access to certain basic provisions for physical activity—for example, safe play areas for children, green open spaces, and safe well lit streets and pavements. In keeping with the emphasis on the importance for health of “active living” for most of the sedentary population—for example, accumulating 30 minutes of moderate activity such as walking on most days of the week,<sup>13</sup>—a key issue in reducing inequalities in health and in levels of physical activity is a reduction of physical and social barriers to everyday opportunities for physical activities in people’s local environments.

SALLY MACINTYRE

Director, MRC Social and Public Health Sciences Unit  
University of Glasgow, 4 Lilybank Gardens, Glasgow G12 8RZ  
email: Sally@msoc.mrc.gla.ac.uk

- 1 Tudor Hart J. The inverse care law. *Lancet* 1971;i:405–12.
- 2 Acheson D. *Independent inquiry into inequalities in health: report*. London: TSO, 1998.
- 3 Marmot MG, Davey Smith G, Stansfield S, et al. Health inequalities among British civil servants: the Whitehall II study. *Lancet* 1991;Jun:1387–93.
- 4 Macintyre S, Maciver S, Sooman A. Area, class and health; should we be focusing on places or people? *Journal of Social Policy* 1993;22:213–34.
- 5 Sooman A, Macintyre S. Health and perceptions of the local environment in socially contrasting neighbourhoods in Glasgow. *Health and Place* 1995;1:15–26.
- 6 Macintyre S, Ellaway A. Local opportunity structures, social capital and social inequalities in health: what can central and local government do? *Australian Journal of Health Promotion* (in press).
- 7 Ellaway A, Macintyre S. Does where you live predict health related behaviours? A case study in Glasgow. *Health Bull (Edinb)* 1996;54:443–6.
- 8 Macintyre S, Ellaway A. Social and local variations in the use of urban neighbourhoods: a case study in Glasgow. *Health and Place* 1998;4:91–4.
- 9 Department of Health. *The health of the nation: a strategy for health in England*. London: HMSO, 1992.
- 10 Scottish Office. *Scotland’s health: a challenge to us all*. Edinburgh: HMSO, 1992.
- 11 Department of Health. *Saving lives: our healthier nation*. London: The Stationery Office, 1999.
- 12 Scottish Office Department of Health. *Towards a healthier Scotland: a white paper on health*. Edinburgh: The Stationery Office, 1999.
- 13 Pate R, Pratt M, Blair S, et al. Physical activity and public health. *JAMA* 1995;273:402–7.