Active travel and health inequalities

activetravel

How walking and cycling can benefit the health of the most disadvantaged people

INFORMATION SHEET FH12

"Physical activity is essential for physical and mental well-being. Some of the most disadvantaged groups in society are also the most sedentary, and the incidence of obesity, diabetes, cancer, coronary heart disease and mental health problems is higher among people in these groups.

Active travel - walking and cycling - is an accessible and cost-effective way of incorporating physical activity into everyday lives, such as during the journey to work, shops, visiting family and friends, or the school run. Thus active travel can play an important role in helping individuals to achieve the recommended levels of physical activity.

Making walking and cycling accessible by improving local infrastructure has the potential to enable those in disadvantaged communities to lead healthier lifestyles and reduce health inequalities."

Sir Liam Donaldson,
Chief Medical Officer,
Department of Health

Introduction

Physical activity is now recognised as an important element of a healthy lifestyle. People who are physically active have a lower risk of non-communicable diseases such as obesity, coronary heart disease (CHD), stroke, cancer and mental health problems. Thirty minutes of moderate intensity physical activity on five or more days a week, and one hour every day for children, is recommended as the minimum to maintain health[1,2,3].

Some of the most disadvantaged groups in society, such as those from lower socioeconomic groups and deprived areas, some ethnic minorities, people with physical disabilities and many older people, are also the most inactive. This is an important factor in the higher incidence of obesity, major non-communicable diseases and mental health problems experienced by these groups.

The UK's health inequalities 'gap' has widened over the past decade, prompting ambitious policy counter-measures. The Department of Health has a Public Service Agreement target to reduce health inequalities in England by 10% by 2010, as measured by infant mortality and life expectancy at birth[4]. In Wales, the Assembly Government has committed itself to reducing deaths from CHD and cancer at a higher rate amongst deprived groups and has placed 'equity in health' at the centre of 'Our Healthy Future' – its strategic policy framework for health through to 2020[5]. Scotland has a National Indicator to

DH Department of Health | healthier scotland SCOTTISH GOVERNMENT | healthyliving | Llywodraeth Cymuliad Cymru Welsh Assembly Government | Her Iechyd Cymru Health Challenge Wales

Active Travel works with policy-makers and practitioners to promote walking and cycling as health-enhancing physical activity. Sustrans is the UK's leading sustainable transport charity and works on practical projects to encourage people to walk, cycle and use public transport to benefit health and the environment.

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"improve healthy life expectancy at birth in the most deprived areas"[6] and has established a Ministerial Task Force to tackle its most significant health inequalities.

Encouraging and supporting inactive groups to participate in regular physical activity has an important role to play in reaching these targets across the UK.

The Chief Medical Officer has stated that "for most people, the easiest and most acceptable forms of physical activity are those that can be incorporated in everyday life"[1]. Walking and cycling for local journeys are accessible and affordable ways for inactive people to incorporate physical activity into their daily routine. It is essential that we create environments which encourage active modes of travel in order to benefit the health of disadvantaged groups.

The most disadvantaged have the worst health

People from the poorest households are least likely to meet the recommended levels of physical activity. They are also the most likely to be sedentary – achieving less than 30 minutes of physical activity per week. For example, 44% of women and 34% of men in the poorest households in England are sedentary, compared to only 33% of women and 28% of men in the wealthiest households[7]. People living in deprived areas are also less likely to meet physical activity recommendations – in the most deprived areas of Wales, people are twice as unlikely to take exercise[8].

These low physical activity levels are a significant cause of health inequalities, with inactive groups suffering poorer health and living shorter lives than the general population. Men in professional occupations in England and Wales live on average seven years longer than men in unskilled manual groups[9]. The infant mortality rate among the lowest income group is 17% higher than in the total population as a whole[10]. Men and women living in the most deprived areas of Scotland have a life expectancy 10 years lower than the average[11].

The prevalence of cardiovascular disease (CVD), stroke and diabetes is highest in low income households[12,7]. From 2004-06, deaths from CVD in the most deprived areas in England were 71% higher than in the least deprived areas[10]. Across 2003-05, around 13,700 fewer people aged between 30-59 years old would have died in the poorest areas of England if death rates had been the same as the rest of the country[13].

Mental health problems are more common in areas of deprivation[14]. In Wales, 12% of people in the lowest income households were being treated for a mental illness in 2005/06 – compared to 6% in the highest income households[15].

Obesity

The recent Foresight 'Tackling Obesities: Future Choices' report predicted that by 2050, the NHS cost of overweight and obesity could rise to £9.7 billion, with a wider cost to society of £49.9 billion. The report points out that those who are already disadvantaged are more likely to suffer obesity and the considerable problems associated with it, including CVD, stroke, cancer and diabetes[16].

This disparity is most evident among women and children: 32% of women in the poorest fifth of English households are obese compared to only 19% of women in the richest fifth[17]; while children from the lowest income households are almost twice as likely to be obese than those from the highest income households[7].

Studies consistently show that residents of neighbourhoods characterised by socioeconomic disadvantage tend to exhibit higher

rates of obesity. The most deprived areas of Wales have been shown to exhibit obesity levels one and a half times greater than in affluent areas[8].

Diabetes

Diabetes is a growing threat to the UK's health and is closely linked to the current obesity epidemic. Deaths from the disease are expected to increase 25% by the middle of the next decade at great social and economic cost[18].

A Diabetes UK report examined the links between Type 2 diabetes and socio-economic deprivation. It concludes that the most deprived in the UK are 2.5 times more likely to have diabetes. Around half the estimated 3 million diagnoses expected by 2010 will be from disadvantaged communities. These groups are also the least likely to access the appropriate care[19].

Cancer

The past 40 years has seen continued advances in our understanding of the causes of cancer and in its treatment. However, not all social groups have benefitted equally from these improvements.

People from deprived communities are both more likely to be diagnosed with cancer and less likely to survive it. Tobacco consumption is a major contributor to this pattern alongside other lifestyle factors including poor diet and insufficient physical activity. Conversely, the better-off are more likely to be aware of the major risk factors relating to cancer and to make associated adjustments to their lifestyle[20].

Ethnic minority groups

People from some black and ethnic minority (BME) groups are less likely to undertake sufficient physical activity to benefit their health. Around 44% of the BME population in England falls within the most deprived fifth of society[13].

Asian (Indian, Pakistani, Bangladeshi and Chinese) men and women in England are less likely to meet the physical activity recommendations than the general population[21]. Physical inactivity is a particular problem among some ethnic minority women, with only 11% of Bangladeshi and 14% of Pakistani women in England and Wales meeting the recommended physical activity levels[21], compared to 28% of women in the general population[17].

Many ethnic minority groups suffer correspondingly higher levels of CVD and diabetes. Prevalence of diabetes is significantly higher in Black Caribbean, Indian, Pakistani, and Bangladeshi men and women than in the general population (4.3% men, 3.4% women). Pakistani men have the highest prevalence of CHD and stroke of all groups[21].

Physical disabilities

People with physical disabilities are less active and more likely to be sedentary than the general population[22], and are also more likely to suffer from poor health and obesity[23]. Poorly accessible neighbourhood environments are likely to hinder people with disabilities more than able-bodied people[24].

The importance of the environment in active living

It is now widely accepted that the form of the built environment is a strong determinant of physical activity levels, with lower development densities and car-focused land use patterns leading to more sedentary travel and lower activity levels[25,26].

People from the most disadvantaged groups are more likely to be subject to an 'obesogenic' environment which discourages walking and cycling, perceiving their neighbourhoods to be busier with traffic, less attractive, and less supportive of walking[27]. The most

deprived people often disproportionately bear the impacts of car-dominated urban planning practice[28].

Lower socioeconomic groups have higher cases of injury and deaths from traffic accidents[29]. More than a quarter of child pedestrian casualties happen in the most deprived 10% of wards[30]. In Wales, children and people aged over 65 are twice as likely to be injured by motor vehicles in deprived areas than in more advantaged areas[8].

Problems including traffic, noise, crime, litter, lighting and public transport service quality have been associated with functional loss among older adults – such as being able to climb stairs – compared with non-problem neighbourhoods[31]. In contrast, living in areas with walkable green space positively influences the longevity of urban-dwelling senior citizens[32].

Low physical activity levels are found among those who perceive their neighbourhood to be unsafe due to crime. Concern about personal safety is a major reason for low levels of walking in disadvantaged neighbourhoods[33]. In one study, European residents in neighbourhoods with high levels of social disorder were about 50% less likely to be physically active and about 50% more likely to be overweight or obese[34].

The benefits of activity-friendly neighbourhoods

Creating activity-friendly environments has a great potential for improving the health of the most disadvantaged groups. Residents of highly walkable neighbourhoods have been found to be more active and have lower body weights than their counterparts in less walkable neighbourhoods, as do those living in areas with high land-use mix[16].

Official guidance is now clearly directing local authorities and others to make the environment more activity-friendly and therefore healthier for all. The National Institute for Health and Clinical Excellence (NICE) Physical activity and the environment guidance, calls for a major shift of priority in town planning away from motor vehicles. Its recommendations include: reallocating road space (e.g. wider pavements, more cycle lanes), restricting motor vehicle access by narrowing or closing roads, ensuring planning applications prioritise active travel, and the use of road-user charging[35]. In a similar vein, the recent government obesity strategy, 'Healthy Weight, Healthy Lives: a Cross-governmental Strategy for England', calls for the creation of urban and rural environments where walking, cycling and other forms of physical activity are the norm[36].

A study of people living in a deprived housing estate on the outskirts of Glasgow where the main road was traffic calmed showed that 20% of adults walked more after the traffic calming, and there was a statistically significant improvement in physical health[37].

The way in which residents perceive their environment has been shown to have an influence on mental health. One study found that areas perceived to be safer and more aesthetically pleasing can enhance mental health, while adverse effects were found in the case of factors such as road congestion and urban noise[38].

Neighbourhoods designed to be 'walkable' (e.g. accessible destinations, street connectivity, high residential density) may generate more pedestrian traffic, increasing surveillance and influencing safety[39]. Shopping and other facilities located within a walkable distance of residential areas[40] have been positively associated with attractiveness and safety and with increased levels of walking among older adults[41].

There is some evidence to show that people with physical disabilities who live in activity-friendly neighbourhoods are more likely to walk or cycle for transport[22,23,24]. A high density of

destinations, continuous and accessible walking routes, well adapted crossings and other signage, and easily navigable topography were all found to facilitate active living for people with disabilities.

Creating an activity-friendly environment

The National Cycle Network (NCN) increasingly focuses on promoting everyday walking and cycling. It can be seen as an example of how an activity-friendly environment can tackle health inequalities by helping people to travel actively within their daily routine.

Research has shown that traffic-free routes in particular promote walking and cycling within the most deprived areas and encourage more women, people from black and minority ethnic groups and older people to cycle[42]. At the end of 2006 almost 60% of the people living in the 25% most deprived areas in the UK were served by at least one route within a mile of their home[43].

Conclusion

Active travel has an important role to play in tackling health inequalities by helping people in the most inactive communities to incorporate physical activity into their everyday lives, through regular walking and cycling.

Creating environments which encourage active travel is beneficial to all, but particularly to disadvantaged groups.

Implementing existing pedestrian and cycle-friendly transport and planning policy – such as in the Department for Transport's 'Manual for Streets' – is an important first step to promoting healthy living and tackling health inequalities.

Active travel interventions

Interventions which promote walking and cycling can have significant health benefits[44,45]; below are a few examples of active travel interventions that target deprived or disadvantaged communities:

Active Lives, Healthy People

Sustrans' Active Travel is working to encourage walking and cycling among people living in the most deprived areas of Luton – a town with almost one in three residents from a BME background. The project refurbishes unused bikes and operates a free bike loan scheme, helping local people who want to cycle to overcome the barrier of ownership.

Wheels for All

Wheels for All is a project offering cycling to people with disabilities and special needs, using adapted bikes such as tricycles with supported or recumbent seats, handcycles and side by side bikes. The project, run by charity Cycling Projects, allows participants to gain the benefits of physical activity and enjoy mastering a new skill, along NCN routes in Hyndburn, Lancashire.

Two's Company

Two's Company is a programme of monthly tandem cycle rides for people who are blind or visually impaired, organised by Bristol-based charity Life Cycle UK. Visually impaired people often have very limited opportunities to take exercise, to keep fit, or to enjoy the local countryside. As well as increased physical activity, participants enjoy the social benefits and many have gained increased confidence.

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