Cycling England

Health on wheels

Nick Cavill **shows how beneficial cycling is for health, and how nurses working in primary, community and public health roles can encourage its use**

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- patients: education
- heart disorders: prevention and screening

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The increasing prevalence of obesity and the crucial influence that physical activity and diet have on health have come into sharp focus in recent weeks with reports from the government's Foresight panel (2007) and the World Cancer Research Fund (2007). The former predicted that Britain will become a mainly obese nation by 2050, while the latter highlighted the big role that bodyweight can play in the prevention of cancer.

However, with increasingly busy lives, people find it difficult to fit exercise into their schedules. This is why the humble bicycle has enormous potential to help defuse the country's public health time bomb. The advantage cycling has over other forms of exercise is the way it can become part of everyday activity, rather than people having to find additional time for exercise. For example, biking to school can help kids to burn more energy than they do in most PE lessons.

It is fair to say that the health benefits of cycling are still undervalued in some parts of the health sector which is why, for the first time, all the available evidence has been collated into one report for health practitioners. Recent economic modelling carried out by Cycling England has also calculated the economic value of cycling for the first time. This estimated that a 20 per cent increase in cycling by 2015 would result in decreased mortality valued at £107 million. Potential savings to the NHS are estimated at £52 million due to reduced illness, with a further £87 million saved by employers through reducing absences from work (Macdonald 2007).

Cycling: evidence for the health benefits

Cycling is an easy and low-impact activity that can significantly improve individual fitness. It can help to reduce the risk of a range of health problems, notably heart disease and cancer, the leading preventable causes of premature death.

One study found that people who cycle to work experienced a 39 per cent lower rate of mortality compared with those who did not, even after adjustment for other risk factors, including leisure time physical activity (Andersen *et al* 2000).

Getting on your bike can yield many of the same health benefits as doing a specific training programme. Cycling for an additional 30 minutes on most days of the week, combined with reducing calorie intake, can achieve weight loss comparable to that achieved by doing three aerobic classes a week.

As well as improving physical health, cycling has a positive effect on emotional health, improving levels of wellbeing, self-confidence and tolerance to stress while reducing tiredness, difficulties with sleep and a range of medical symptoms.

Cycling burns at least five kilocalories per minute (depending on a number of factors, notably the body weight of the cyclist), offering the potential to expend considerable amounts of energy over the course of a journey.

Cycling is also particularly well suited to overweight or obese people, as approximately 70 per cent of body weight is borne by the saddle, thus providing the required cardiovascular exercise without putting excess strain on the musculoskeletal system. During jogging, two to three times the body weight is borne by the hip joint, representing a massive overload for these patients.

Safety

One of the barriers to taking up cycling is a perception of the physical danger posed by motor traffic. However, the real risks are minimal and outweighed by the health benefits by a factor of around 20 to 1 (Hillman 1992). It may be more risky to your health to be sedentary. Being sedentary presents a greater risk: over 50,000 people die in the UK each year from coronary heart disease related to insufficient physical activity, compared to around 100 cyclists killed on the road.

The actual risk of cycling is small: there is one cyclist death per 33 million kilometres of cycling. It would take the average cyclist 21,000 years to cycle this distance.

So what can nurses and other health professionals do?

Lead by example

Make sure your primary care trust (PCT) has a travel plan for its staff with good provision for cycling. Audit the provision of cycle parking for staff, and other facilities such as showers. Pay a meaningful cycle mileage allowance, at the same level as the car mileage allowance if possible. Make sure the PCT is signed up to the Bike to Work programme (which enables staff to purchase bikes at significantly reduced cost through a salary sacrifice scheme). Audit the provision of cycle parking for patients and visitors at hospitals and health centres. This encourages more cycling and makes a visible commitment to cycling.

Liverpool PCT, for example, is one of the few to employ a full-time cycling officer to promote cycling and coordinate a programme of led rides for priority target groups. The PCT and local authority work closely on strategic issues influencing provision for cycling through a transport, health and environment forum.

Influence policy

Work with the local authority to influence the content and delivery of the local transport plan. Don't just focus on direct measures for cycling but include measures aimed at reducing traffic speeds and volumes; improving road safety more generally; and tackling planning, such as out-of-town shopping centres, that encourages car dependency.

Link up with the local authority road safety team to influence school travel plans in your patch, emphasising the health benefits of active school travel. Ensure cycling is integrated into key aspects of local public health policy, especially local area agreements.

In Nottingham, the PCT is developing an innovative approach to promoting cycling through working with NHS health trainers, who will be encouraged to offer cycling as a core part of their public health work alongside issues such as smoking prevention and promotion of healthy eating. Health trainers will be trained in how to introduce cycling, targeting the most deprived areas in the city.

Actively promote cycling

Make sure that cycling is offered as an option to all patients whose health would benefit from increased physical activity. Fund a programme of Bikeability cycle training for key workers in contact with the public and/or for priority population groups. Bikeability (www.bikeability.org.uk) is cycling proficiency for the 21st century, providing young people and adults alike with the skills to handle today's road conditions.

Link to local cycling clubs, who may be able to offer training, rides and promotional events. Health trainers, school nurses and health visitors can reinforce the message about cycling being important for the health of children.

In Bolton, the PCT is working closely with the local authority and a cycling charity to offer ten-week cycling programmes to people who are returning from ill health or who want to be more physically active. Activities include:
- community bike rides led by instructors trained to the national standard
- bike maintenance sessions
- an introduction to cycle groups and clubs to help participants continue cycling when the scheme finishes.

In Northamptonshire, cycling is being included in the award-winning work of the Healthy Communities Collaborative, which recruits local people as volunteers to take part in health promotion programmes. The "Easy Rider" programme will offer guided leisure cycling rides, access to cycles at low or no cost, and transport for cycles to safe places to ride.

Conclusion

It's vital for the health of the nation – and the health of the planet – that health and transport professionals focus on positive actions to encourage cycling, especially where a cycle journey will replace a car journey.

Local transport and health authorities need to recognise the potential of cycling to improve many aspects of public health, and place it at the heart of a healthy transport strategy, devising safe cycling policies and promoting the use of cycling every day by children and adults alike ■

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