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EDITORIALS

Healthier commuting

Leave your car at home

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There is increasing interest in persuading the public to drive less and to walk and cycle more to achieve health, transport, and environmental policy objectives. Immediate health benefits from this transition will be derived from increased physical activity and associated protection from weight gain, reduced air pollution, and less noise. The linked article by Flint and colleagues (doi:10.1136/bmj.g4887) looks at this first health benefit in a UK based study examining associations between mode of travel to work and adiposity. The authors found that people who walk or cycle to work had a lower body mass index and lower percentage body fat than those using private transport (cars and motorcycles).[1] These anticipated findings add to a well developed evidence base from other settings summarised in systematic reviews.[2] Despite use of a cross sectional design, the study of Flint et al builds on existing evidence by using a large national dataset with objectively measured outcomes, as well as being able to adjust for important covariates such as diet and work based physical activity.

The most interesting and perhaps important finding of the study was the reduced adiposity associated with commuting to work by public transport. For example, in fully adjusted models the mean body mass index of men travelling to work by public transport was lower by 1.1 (95% confidence interval 0.5 to 1.7) than that of men using private transport. The corresponding difference for those walking or cycling (combined) to work was 1.0 (0.4 to 1.6) lower. This benefit is likely to accrue because use of public transport generally involves walking and occasionally cycling to transport access points or interchanges, thus increasing incidental physical activity. This is illustrated by a US study which found that users of public transport walk for an average of 19 minutes as part of their daily commute and 29% of public transport users achieve recommended levels of daily physical activity from this mode of travel alone.[3] Consistent with this is the finding that provision of free bus travel to older people in England has been associated with greater use of public transport, more frequent walking, and a lower likelihood of becoming obese.[4 5]

The study by Flint et al highlights the importance of the commute to work as an opportunity to increase population levels of physical activity. Unfortunately active commuting has declined steadily in most high income countries since the mid-20th century as car ownership has grown. For example, the percentage of the English population travelling to work by car or motorcycle increased from 42% in 1971 to 67% in 2011. In that year, 18% travelled to work using public transport, 11% walked to work, and only 3% cycled to work.[6] Similar trends are emerging in many low and middle income countries, where governments and donors have prioritised investments in road infrastructure, and levels of motor vehicle ownership have soared. For example, there was a 38-fold increase (from three million to 115 million) in the number of registered motor vehicles in India between 1981 and 2009. Within country differences exist, with persons living in urban India being much less likely to use active travel to work than their rural counterparts.[7] This variation likely explains some important urban-rural differences in the prevalence of diabetes and cardiovascular disease in the country. Increasing car ownership has also been linked to increases in obesity in China.[8]

The importance of active travel for achieving desired health, transport, and environmental outcomes is increasingly being recognised by national and international policy makers. The World Health Organization's *Global Action Plan for the Prevention and Control of Non-Communicable Diseases (2013-20)* urges member states to "introduce urban planning and transport policies to improve the accessibility, acceptability and safety of, and supportive infrastructure for, walking and cycling."[9] But what specific transport policies should governments implement to increase active travel? Measures that address the structural, environmental, and financial barriers to active travel are more likely to have sustained impacts as they are able to help embed physical activity into everyday activities.[10] Considerable experience is available from natural experiments internationally, especially from Denmark, Germany, and the Netherlands, where sustained investments in cycling infrastructure in particular have helped these countries buck the global trend of declining levels of active travel.[11]

Summarising this experience along with the available research evidence, the National Institute for Health and Care Excellence (NICE) asserts that "pedestrians, cyclists and users of other modes of transport that involve physical activity (i.e. public transport) should be given the highest priority within transport policy."[10] Specific transport policy recommendations by NICE

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include reallocating road space to support walking and cycling (such as by widening pavements and introducing cycle lanes), restricting motor vehicle access in residential areas, introducing road user charging schemes, introducing traffic calming schemes to restrict vehicle speeds, and creating safe routes to schools. Ensuring public transport is safe, accessible, and affordable, especially for children, elderly people, and low income groups, is also critical to enable transitions away from car use to occur.

Given the political sensitivity around policy measures that discourage use of cars, it is crucial that the public health community, including healthcare professionals, provide strong and consistent messages to politicians and the public which frame these measures as positive public health actions. Healthcare professionals are additionally well placed to advise patients to "leave your car at home" and increase the number of trips they make for work, shopping, and leisure using public transport, walking, or cycling. This will not only improve their patients' health in the short term but also help reduce the likelihood of hazardous climate change further in the future.[12]

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