

1 Editorial

3 International recognition of the links between transport, health and 4 sustainability

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7 Sustainability is intimately tied to the transport-health relationship and is an inherent part of the
8 work reported in this journal. The synergies between sustainable - also called 'green' or 'low carbon'
9 - transport policies and health-promoting transport policies are well-recognised (Mindell et al, 2011).
10 Reductions in travel by aeroplane or private car, more walking and cycling, public transport (transit)
11 use for journeys that cannot be travelled on foot or bicycle, together with reductions in trips and
12 particularly in distances will all yield a wide range of benefits for individuals, local communities,
13 wider society and the planet.

14 Transport and health is increasingly being acknowledged internationally as an important area that
15 affects the population's quality of life, relationships with the built and natural environment, social
16 justice and inequalities, as well as societal costs, both in economic terms and relating to
17 sustainability, including some of the UN Sustainability Development Goals (SDGs). Achieving a shift
18 towards more sustainable modes requires changes beyond transport planning and public health
19 policy, particularly a shift in spatial planning to put education, work, and social activities within short
20 distances of home. This needs political will. It is good news that in June 2017, the Transport
21 Ministers of the 57 member countries of the International Transport Federation (ITF) issued a
22 statement on transport, in which they articulated their political will to improve governance to
23 achieve internationally agreed objectives. These include those set by the Paris Climate Agreement
24 and the SDGs. They confirmed the importance of co-operation as urbanisation increases worldwide,
25 to ensure that urban transport systems provide inclusive access to services in a sustainable way,
26 with improved co-ordination of transport, land use, and fiscal policies (International Transport
27 Federation, 2017) The challenge for researchers is to produce evidence-relevant research (Giles-
28 Corti et al, 2015). It is therefore timely that Khreis and colleagues (2017) have summarised a large
29 range of urban transport policies to help practitioners understand the potential health impacts.
30 Boehmer et al (2017) have done similar work in the USA, producing a Transport and Health Tool for
31 USA practitioners.

32 Modelling tools help to quantify the important connections between transport and health as well as
33 other outcomes. Maizlish and colleagues (2017) have used the Integrated Transport and Health
34 Impact Modeling tool (ITHIM (Whitfield et al, 2017; based on Woodcock et al, 2009)) to demonstrate
35 how increasing walking and cycling for transport can not only improve the health of those individuals
36 but can also contribute to slowing the forecast rise in CO₂ emissions in California. Use of the Health
37 Economic Assessment Tool (HEAT) demonstrated that the number of deaths averted by increased
38 active travel in the Netherlands varies by population sub-group, being larger in those groups that
39 walk or cycle more (older people, the wealthier, and Dutch-born residents) but also among poorer
40 groups that have a higher burden of disease (Gao, 2017). The authors point out that encouraging
41 more active travel among the population groups with lower walking and cycling levels could not only
42 improve population-level health but may also reduce inequalities.

43 Empirical studies provide more evidence of the connections between transport, health, and
44 sustainability. In Sydney, Australia, cycling increased among people living near a new cycleway,
45 particularly those living 1-3km from the new infrastructure, at a time of reduced cycling elsewhere.
46 Social capital also increased in that area, although overall physical activity and quality of life did not
47 (Crane et al, 2017). A study comparing energy expenditure and VO₂ (oxygen consumption) when
48 travelling a hilly 4.4km route on foot, by bicycle, or e-bike found that energy expenditure and VO₂

49 per minute were the same for all three modes, but because of the decreased duration of travel
50 across the three modes, e-bikes expended 24% less energy than conventional bikes and 64% less
51 than walking (Langford et al, 2017).

52 In this issue, Kwan et al (2017) also combine these themes of sustainability, reducing CO₂ emissions,
53 air pollution and public transport. They conclude that although two mass rapid transit lines in
54 Greater Kuala Lumpur, Malaysia, would reduce CO₂ emissions substantially, use of private motor
55 vehicles to travel to or from the stations would reduce the benefits by a quarter. Huang et al (2017)
56 found an increase in station-related walking among people living within 1 mile after the opening of
57 new light rail transit stations in Seattle, but overall walking fell. They posit that walking will increase
58 over time, as transit-oriented development increases, bringing both more businesses and more
59 people living within walking distance (ideally <0.75 mile) of the station and these other potential
60 destinations. These benefits that mass rapid transit (bus rapid transit (BRT) and light rail) can bring
61 are exemplified by the recent Transport Achievement Award given by the International Transport
62 Federation (<https://www.itf-oecd.org/>) to the Metrobus 9 de Julio project in Buenos Aires,
63 Argentina, which led to fewer cars, reduced CO₂ emissions from traffic, more pedestrians, and new
64 businesses opening.

65 Shorter distances, higher residential densities, and more potential destinations were among the
66 elements associated with walkability and more walking in an Australian context (Badland et al,
67 2017). This research group have now examined factors associated with a number of different travel
68 modes in residents of Melbourne, Australia. They found similar associations between walking,
69 cycling or public transport trips with high intersection density, residential density, land use mix,
70 diversity of destinations and proximity of key destinations including supermarkets and public
71 stations; the same factors were associated with reduced car use (Boulangé et al, 2017).

72 Congratulations to the organisers of the third International Conference on Transport and Health
73 (ICTH), held in June 2017 at ISGlobal, Barcelona, and to the winners of the various prizes for high
74 scoring abstracts and posters. As with the preceding two conferences, the accepted abstracts were
75 published by this journal and are available in an open access, online supplement to volume 5, at
76 www.sciencedirect.com/science/journal/22141405/5/supp/S?sdsc=1. Any published papers that are
77 based on work presented at ICTH will also be available through our system of Virtual Special Issues,
78 at www.sciencedirect.com/science/journal/22141405/vsi/10B1N46737R?sdsc=1. Next year's
79 conference will be in Michigan 24-27 June 2018 (www.tphlink.com/conference-schedule.html).

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