

'Public perceptions of a city centre 20mph speed limit zone, Belfast United Kingdom: a mixed method study'

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Introduction

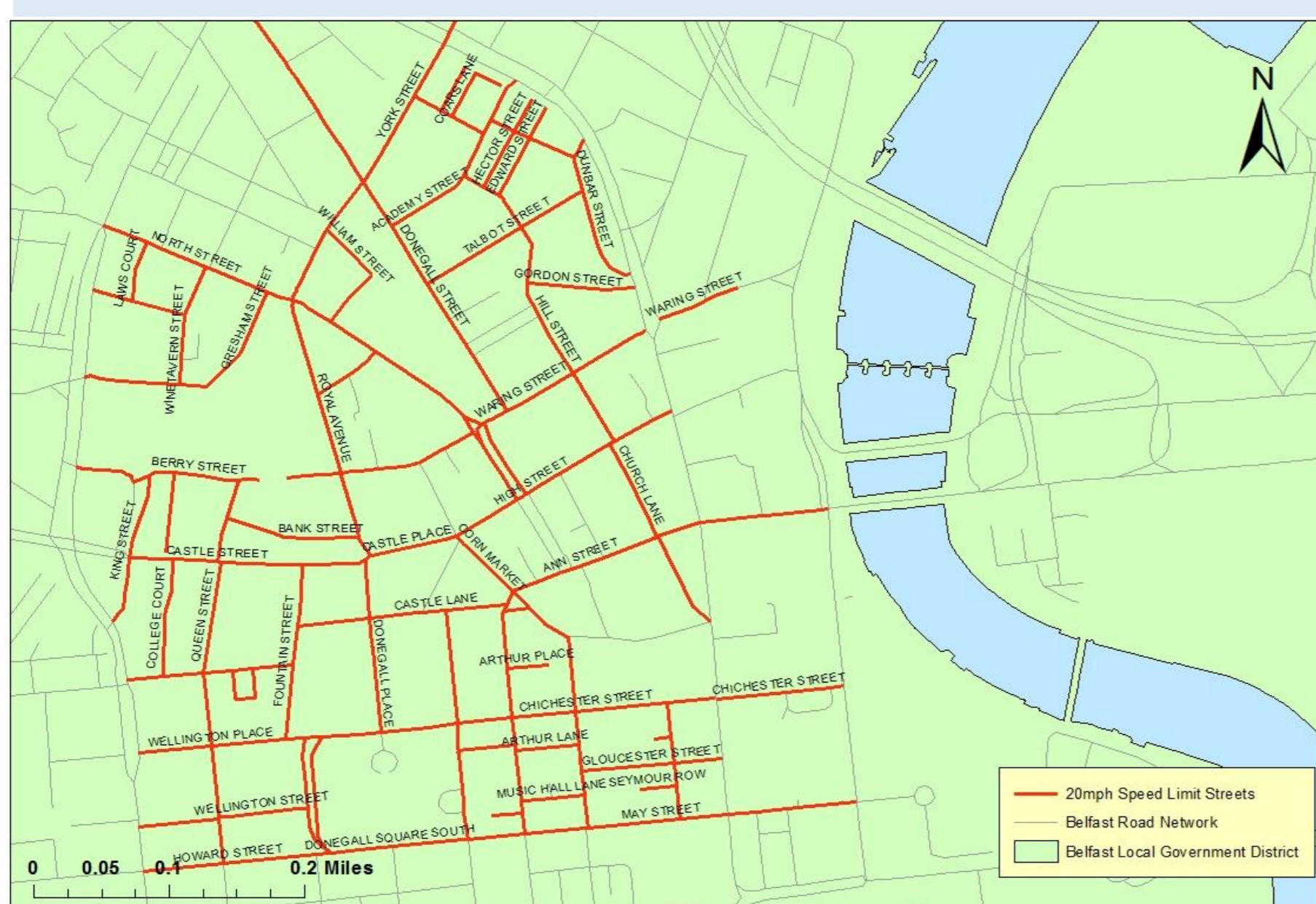
Traffic is a determinant of health which impacts all communities regardless of location and socio-economic status. The use of motorised vehicles has received negative attention, specifically in relation to collisions resulting in deaths and casualties (including pedestrians and cyclists) with evidence showing casualties are socially patterned with higher levels in disadvantaged areas. In addition, motorised transportation adds to the burden of physical inactivity causing a reduction in active transport and an increase in sedentary behaviour.



A simple and cost-effective city centre 20mph speed limit intervention (road signage and legislation) was implemented in Belfast, city centre (76 streets) as it had the capacity to have direct (collisions, casualties and safety); and indirect (active transport and active living) impacts. As a population approach it also has the potential to shift cultural norms and attitudes about cars, which negatively impact health and the health of our planet. As current evidence is ambiguous for the effectiveness of speed limits the current study aimed to examine perceptions in relation to health, safety and active living and transport.

Methods

Cross-sectional survey (May 2018); and focus groups (July-December 2018). Sampling adults aged ≥ 17 years' old who live, work and/or travel through Belfast. Statistical analysis in SPSS and thematic analysis in NVivo.



Results

490 survey and 60 focus group participants (n=9) were recruited. Survey: the majority were 21-30 years (n=145, 29.6%) and reported the following answers:

	Percentage of sample (n)
Understood why the speed limits were introduced	73.9% (362)
Disagreed with speed limits being a 'bad idea'	54.4% (267)
Thought the speed limits would make people drive slower	62.0% (304)
Agreed the limits have led to an increase in cycling	35.2% (160)
Neither dis/agreed with speed limits leading to an increase in how pleasant the area is to live/work	42.5% (186)
Agreed speed limits will lead to safer streets	71.9% (326)
Neither dis/agreed speed limits will lead to an increase in more opportunities to socialize	48.8% (216)

When perceptions were probed further qualitatively, analysis highlighted the intervention as a beneficial starting point for change (promotion of safety (pedestrians and cyclists, potential reduction in number and severity of collisions) although more work is required alongside speed limits to increase active living (education, cycle paths, pedestrianisation, awareness and enforcement).



Discussion

Reduced speed limits provide a cost-effective starting point to instigate change. However further work is required to build upon initial change in behaviours, safety and active transport and living in order to maintain change in the longer-term.

Implications

Speed limits have the potential to offer a cost-effective intervention to improve active living and increase physical activity regardless of community demography. It can be implemented in any area and could impact those are at greatest risk for physical inactivity and its related diseases.