Journey to work: the potential for promoting active transport?

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A recent issue of the *Journal* (Vol 10, No. 3) focused on the intersection between the transport and health sectors, illustrating the possibilities for health promotion. Active transport – any form of transport that includes walking, cycling and travelling by public transport as part of journeys to work, school, shopping or other places – is particularly amenable to health promotion intervention as it is consistent with physical activity promotion messages.

However, aside from a Census question¹ and general travel mode surveys (e.g. Transport Data Centre²) there are surprisingly few data on the journey to work (travel mode behaviour) that might be useful for developing an active transport promotion intervention. To collect some of these data, face-to-face interviews about mode of transport to work, attitudes to active transport and barriers to active transport were conducted among staff working in the Queen Mary Building, a large administrative health facility in the Central Sydney Area Health Service and close to transport routes. Ninety-four staff (about one-third of total staff) were randomly selected from staff lists, with 68 people (16 men and 52 women) completing interviews, giving an 81% response rate after excluding those who were not available during the study period.

Ten per cent of staff usually walked to work, 63% travelled to work by car (6% as a passenger and 57% as a driver), only 1% cycled to work and 24% travelled by public transport. Eightysix per cent of car users travelled to work a distance greater than five kilometres. Not surprisingly, the distance to workplace was a significant factor associated with mode of transport. Compared with active transport users, car users were more likely to travel to work over five kilometres with odds ratio 5.7, 95% confidence interval 1.7-18.3 (see Table 1). Noticeably, 14% who

Table 1: Comparisons of active transport users and car users in gender, age and distance to work.

	Active transport users	Car users
	n=25	n=43
Gender		
Males	7 (28.0%)	9 (20.9%)
Females	18 (72.0%)	34 (79.1%)
Age		
Mean	38.3	43.0
Median	38	45
Mode	30	46
Distance to work		
≤5 km	12 (48.0%)	6 (14.0%)
> 5 km	13 (52.0%)	37 (86.0%)
	OR=5.7	95% CI (1.7-18.3)

travelled by car lived within five kilometres. Active transport users appeared to be younger than car users (see Table 1), but this was not statistically significant. No significant difference was found in gender between active transport users and car users.

When those who travelled by car were asked what prevented them from using active transport to travel to work, almost 60% saw distance, inconvenience, or time as the major barrier. When they were asked what would motivate them to use active transport, environmental reasons or fast and easier public transport were most frequently mentioned. Ten per cent of staff said nothing would motivate them to use active transport. When those who were active transport users were asked what would help them maintain the current mode of transport, more than half mentioned improved walking/cycling routes, improved amenities (showers, cycling racks) or discount travel passes through salary deduction.

Attitudes to active transport were also examined. Overall, active transport users showed more positive attitudes to public transport (see Table 2) than car users. Both groups showed agreement with the statement 'travel to work is a good opportunity to exercise' and 'if I could, I would definitely walk to work'. About 40% from both groups would definitely cycle to work if they could.

Table 2: Attitudes to active transport among active transport users and car users.

	% of agreement to the statement items		
Statements	Active transport users n=25	Car users n=43	<i>p</i> value
I would like to use my car less often ^a	84.3	59.5	< 0.05
I believe public transport should be the main form of transport to work ^a	84.0	55.8	< 0.05
Travel to work is a good opportunity to exercise	92.0	83.7	> 0.05
People who drive to work help to destroy the environment	76.0	74.4	> 0.05
If I could, I would definitely cycle to work	40.0	37.2	> 0.05
If I could, I would definitely walk to work	87.5	81.4	> 0.05
If I could, I would definitely catch public transport to work ^a	87.5	58.1	< 0.05

(a) Statistically significantly different

Although the results of this study are limited by the relatively small sample size, the findings are consistent with other travel mode surveys. The proportion of car users commuting to work in Sydney varies from about 25% into the Sydney Central Business District to about 85% in the regional commercial centres² and so the proportion of car users involved in our study is relatively high.

There is considerable potential for changing the journey to work (among our staff car users), although the distance involved for most staff suggests that the mode shift would be to public transport. The barriers of distance and perceived barriers of inconvenience or time cost by using active transport need to be addressed in implementing an active transport intervention, possibly by emphasising the physical activity gains to be made. Those people driving to work who live within five kilometres could be a primary target as these distances are highly amenable

to cycling or even walking. The population health benefits through increased physical activity of even a 10% travel mode shift could be enormous.

References

- 1. Australian Bureau of Statistics. Census 7 August 2001. Canberra: ABS; 2001.
- Transport Data Centre. Sydney Travels 1997 Travel Characteristics of Sydney's Residents. Sydney: Transport Data Centre, NSW Department of Transport; 1999.

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