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Working Party on Road Traffic Safety
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COLLABORATION WITH OTHER ECE BODIES AND INTERNATIONAL ORGANIZATIONS

Transmitted by the Cochrane Injuries Group

Under this agenda item, the Working Party will receive a presentation from representatives of the Cochrane Injury Group, which is carrying out a review of the effectiveness of pedestrian safety education programmes. Summary information on the review is provided below.

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Safety education of pedestrians for injury prevention: a systematic review.

Background

Almost one million people died in 1990 in road traffic accidents around the world (Murray 1996). The Global Burden of Disease Study projected 1.39 million deaths world-wide (all ages) in 2000 (death rate: 23 per 100,000) due to road traffic accidents, including 279,000 children under 15 and 209,000 adults of 60 or more (Murray 1996). 10-15 million persons are injured in road traffic crashes world wide each year (1985-1986), leading to numerous avoidable hospitalisations and disabilities (UK-TRL 1991). The total annual cost of traffic injuries has been estimated to be 1-3% of the gross domestic product (GDP) in many developing countries. Countries with a GDP per capita of less than $3,500 (assuming an average cost of 1% of GDP) lose up to $25 billion annually (Barss 1998).

Pedestrians account for a considerable proportion of all traffic fatalities, up to 84% in some developing countries (Barss 1998). Fatality rates are more than 15 times greater for pedestrians than for car occupants (78 vs 5 per billion passenger kilometres, United Kingdom figures) (Barss 1998). In the western industrialised world, the single leading cause of mortality in 5-9 year old children is pedestrian injuries (Rivara 1990). The elderly constitute another vulnerable group of pedestrians (Barss 1998).

To prevent pedestrian accidents, authors have recommended a combined strategy of education, law enforcement (reduced speed limits in residential areas) and environmental modification (traffic calming schemes, improved urban design) for more than 30 years (Avery 1982, Rivara 1990). In many countries, one component of prevention of pedestrian injuries is through pedestrian safety education programmes provided to children or their parents, and to the elderly. The effectiveness of pedestrian safety education programmes in reducing pedestrians accidents is not clear so far and the money invested in them might be better allocated to environmental changes (Roberts 1994). Some reviews have been carried out on injury prevention but they included causes other than pedestrian crashes and were focused on children and/or adolescents (Towner 1996, Munro 1995). But they included trials of lesser quality than randomised controlled trials (RCTs) and there has been no clear attempt to find non-English publications. Results from RCTs are less prone to bias than other study designs when comparing alternative forms of healthcare (Mulrow 1997).

The aim of this systematic review of randomised controlled trials is to quantify the effectiveness of pedestrian safety education programmes in reducing pedestrian injuries, with a clear attempt to retrieve trials from English and non-English speaking countries.

Objectives

1. To quantify the effectiveness of pedestrian safety education programmes on mortality and morbidity of pedestrian injuries due to road traffic crashes.
2. To quantify the effectiveness of pedestrian safety education programmes for pedestrians on modification of knowledge, skills, attitude and behaviour of pedestrians

References

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The full text of the review can be found on the internet: http://www.ich.ucl.ac.uk/srtu/docs/prot_od.htm

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