ISSUES IN MEDICINE

'One million people die on the world's roads every year' – are there any hopes of alleviation?

Alexander R P Walker, Betty F Walker, Ahmed A Wadee

A recent alarming report by the World Health Organization and the World Bank[1] suggests that nearly 1.2 million people die on the world's roads each year. This number is expected to rise by 65% over the next two decades,[1] with most such deaths occurring in the developing world. Other data indicate that Britain now has the safest roads in the world.[2] Numerically, 5.9 people out of every 100 000 inhabitants are killed on British roads each year, compared with 11.0 in the European Union as a whole, 8.2 in Japan, and 15.2 in the USA. This figure rises to 42.2 in El Salvadore, a developing country. In India, with a population of about 900 million, 217 000 people perished in road accidents in 1998. South Africa has a population of about 45 million people — in the year 2000 there were half a million deaths, of which 18 000 (3.6%) were caused by road accidents.[3]

It is therefore of interest to ask about the development of road accident mortality.[2,4] In 1896, at the London inquest into the world's first automobile fatality, the coroner said 'this must never happen again'. Alas, since then 25 million people have died on roads worldwide. Additionally, the number of people injured annually could be as high as 50 million.

For more than a century alcohol has been recognised as one of the principal risk factors for motor vehicle crashes.[5] Of the approximately 35 000 fatal motor vehicle accidents that occur annually in the USA, nearly half are alcohol related. Currently, in most countries, the legal limit for blood alcohol concentration in 0.08 mg per 100 ml. However, it has been pointed out that at this level a 72 kg man can drink four bottles of beer. The limit can have serious consequences, for it has been shown that a driver's risk of being in a fatal crash increases significantly from a blood alcohol concentration of as low as 0.02 mg per 100 ml. Clearly the legal limit is too high.[5]

Globally, the threat to life from road traffic accidents is high compared with other disabilities. Current global research and development support per disability-adjusted life year for HIV, asthma, and blindness are 26.2, 10.8 and 5.4 dollars, whereas only 0.40 dollars is available for road traffic injuries.[6]

Dr A R P Walker is head of the Human Biochemistry Research Unit at the South African Institute for Medical Research, Johannesburg. Mrs B F Walker joined her husband in the early 1970s, having been trained in domestic science before her marriage. Ahmed A Wadee is professor of Immunology and head of the School of Pathology at Johannesburg.

It is important to appreciate that over the last 30 years there has been a progressive decline in the number of road deaths (albin unevenly) in most Western countries.[7] Moreover, it has been reported that the bulk of the global burden of road traffic-related deaths now occurs in low and middle-income countries. Those in South-East Asia and the Western Pacific regions now account for more than half of all road traffic deaths.[8] Furthermore, the burden is such that more than half of all these fatalities now occur among young adults between 15 and 44 years of age. Such individuals are often breadwinners, most of whom, moreover, may never have owned a vehicle.[8] In brief, most road traffic collisions affect communities and countries that can least afford to cope with the resulting injuries.[9]

It has been argued that much more could, and should, be done to prevent accidents, namely with regard to control and enforcement, driving under the influence of alcohol, speed, red light cameras, road design and construction, and safe vehicle design.[7] It has also been urged that there should be a more concerted effort to establish better emergency care, random alcohol breathalyser tests, safer cars, and rigid seat belt and helmet laws.[2] These much-needed steps should be taken swiftly and enforced effectively. Indeed it has been urged that in this respect there should be a new millennium development goal worthy of global commitment,[9] within the next 5 years.

As indicated, there are proportionately more than twice as many road deaths in the USA than the UK.[1] Interestingly, there are other highly important differences between the two countries; healthwise for instance the prevalence of obesity in the USA is more than double that in the UK.[10] Such enormous differences in mortality/morbidity situations in highly civilised countries urgently require elucidation.

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