

Although injury is a health problem, it is clear that the budget allocations of WHO itself were heavily skewed towards infectious diseases in 2006–2007, with less than 1% of the WHO budget allocated to injuries and violence.<sup>2,3</sup> Vested interests in certain diseases by ministries of health reflect similar patterns, ensuring that injury prevention resources are not commensurate with the size and preventability of the problem.

Despite commitment to injury prevention through World Health Assembly and United Nations resolutions,<sup>4</sup> ministries of health can and do fail their constituencies with regard to injury prevention, exemplified by the Australian Department of Health and Ageing axing its Injury Prevention unit in 2009,<sup>5</sup> despite injury remaining the leading cause of death for Australians aged 1–44 years. Injury is also absent from major Australian prevention initiatives.<sup>6</sup>

But injury is not only a health problem. Other sectors must also take greater responsibility. Indeed, safety is written into the responsibilities of many jurisdictions though the scientific and systematic approach, demonstrated to good effect by road safety authorities in many countries, is not necessarily broadly understood and embraced. Nevertheless, examples exist of sector-led progress including product safety, sport and recreation, planning and building sectors.

Despite alternative leadership examples, health must fulfil the fundamental role of providing detailed quality data and coordinating action and must not abdicate these responsibilities.

## Translation of research to implementation

While Pless notes that injury research is not enough, an even more fundamental problem is the lack of adequate child injury data from many countries. Even within high-income countries, statistical blind spots mask product, work-related and sports and recreational injury. Importantly, the standard practice of grouping mortality and morbidity into 0–4 years of age masks high rates of injury in the 1–4 years age group. Problem definition is lacking because of poor data: how big are specific injury problems and where are they located in countries or regions?

As noted by Pless, many countermeasures to child injury problems are known and their efficacy proven. Confusion exists, however, with regard to translating research to implementation both within and between countries. Countermeasure efficacy is surely transferable, so long as the problems are similar, as it is based on physical and biological principles.

A successful model for translation of research to policy and practice has been used by the Monash University Accident Research Centre (MUARC) in Australia for more than 20 years. MUARC has worked with government and industry to identify major unresolved injury problems and undertaken applied research to solve them. A limited term project advisory committee is appointed comprised of key stakeholders and funders with the capacity to advise on the research and to implement its findings. This process garners engagement with the project and a level of ownership by the committee. Many MUARC research results, while also disseminated through the

scientific and stakeholder literature, have been taken forward into state and national regulations, Australian and international standards, the Australian Building Code and a wide range of government policies and strategies. The media also engages closely with MUARC research findings, stimulating public debate and reinforcing translation to prevention.

In my view, “knowledge brokers” are not a likely solution, as the strongest and most credible advocates remain the researchers themselves so long as they commit to the extension of the research process through policy reviews, standards committees, media and other implementation strategies. Of course, research funders must also adapt their funding model to include these functions.

The other outstanding question highlighted by Pless is whether or not similar implementation methods, as opposed to countermeasures, work in different countries, climates, social circumstances and cultures? This question remains to be answered by intervention trials and other effectiveness studies. ■

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## It's all about money

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Child injury is a broad category and so I will limit my response to the problem of traffic injury, the problem with which I am most familiar. I became obsessed with this issue while working as a paediatrician on an intensive care unit. I once anaesthetized a ten-year-old girl, the victim of a high-speed road crash, so that she could be taken for urgent surgery to stop her internal bleeding. When she arrived at the hospital she was awake but deathly pale. I reassured her that she would be fine. She never woke up. I worked nights on the unit where the mother of a brain-dead two-year-old wailed desperately all night long. Her daughter's head had been squashed under the wheels of a car. Her child had the same name and was

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the same age as my own daughter. These experiences scratched grooves in my memory, which later became conduits, directing strong emotion to an issue that many people treat with indifference.

I had several questions that demanded answers. Why do some health problems become public issues demanding societal solutions, whereas road trauma, a leading cause of child death worldwide is trivialized, remaining a matter for personal responsibility? Why is the death of a child following child abuse taken as clear evidence of the failure of our collective efforts to protect children, whereas a child pedestrian death represents only the failure of an individual child to take care while crossing the road? Why did President Nixon “declare war” on cancer and not road trauma, when more children died on the roads that year than died from cancer? Why did an insidious proliferation of cells take on the violent metaphor of war, instead of road trauma with its twisted limbs and torn flesh? It seems to me now that some deaths are more acceptable than others and that the distinction is an ideological one. In other words, I agree with Dr Pless: injury is a political issue. Governments blame the victims in road traffic injury and take no real preventive action because it serves the economic interests of the world’s most powerful companies to have it that way. It is better for profits to blame victims than to take real action to make the world a safer place.

The global economy revolves around resources, factories and markets. Raw materials are transported to factories where workers produce manufactured goods. These goods are then transported to markets where consumers can buy them. If consumers are willing to pay more for the goods than it cost to produce them, the company will make a profit. And making a profit is what business is about. Cheap transport is good for profits because it reduces the costs of production and enables companies to take advantage of the lower wages of workers in poor countries. It is more profitable to set up factories in low-income countries where wages are low than in wealthier countries where workers enjoy decent wages and

standards of living. But poor people cannot afford to buy expensive manufactured goods and so the goods have to be transported back to markets in high-income countries. Road deaths and injuries, physical inactivity and climate change are part of the real social and environmental costs of road transport, but these costs are borne by other people and not by those who profit from the use of motor vehicles.<sup>1,2</sup> If a truck kills a child, the family suffers the loss, not the truck owners. The greenhouse gases produced by vehicles in rich countries, contributes to the global warming that is causing malnutrition and disease in poor countries. Economists call these spill-over costs “externalities” but, having treated children seriously injured in road traffic crashes, their suffering seems to me an ethical human justice issue, rather than an accounting problem. Keeping transport costs low for business means that the suffering and environmental destruction that road transport causes is kept out of the limelight.<sup>3</sup> However, we are coming to the end of the road. Climate change now threatens our survival as a species. Unless we radically restructure how our economy works, it will be the end of us all.<sup>4</sup> We must value things differently and re-orientate the economy towards increasing human development rather than increasing gross national product. And a world that valued human development would not tolerate the fact that every year some 300 000 children are killed on the roads. ■

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