

Round table discussion

Which pill should we take?

Shanthi Ameratunga^a

When Dr Pless presents his qualifications “to pontificate” on preventing child injuries, he forgets to mention that he has nurtured, cajoled, nagged and inspired a generation of researchers and practitioners in the field to strive for a better deal for children. I am among those so privileged. Perhaps for this reason more than any other, I find myself contemplating his convictions along with the likelihood that these might result in the goals to which we aspire.

Drawing on her study of Lewis Carroll’s book *Alice in wonderland*, Alison Gopnik notes, “our unique ability to understand our world by creating theories is the same ability that lets us imagine possible worlds: science and fiction have a shared foundation”.¹ But do we have the courage to effect the changes required?

Injuries are a health problem but, even in settings where health departments are aware of their responsibilities, injuries could be viewed in an unhelpful light. For example, an algorithm designed to identify populations at increased risk of hospital admissions in England excluded injury admissions from the analysis.² The reason provided was that “most major trauma is generally not preventable or avoidable”. It could be argued that relative to chronic conditions (e.g. diabetes, coronary heart disease), more effort is required to evaluate injury prevention strategies in community settings. However, this disadvantage is magnified when injuries are considered discrete episodes that the health sector can do little to prevent. Perhaps we could gain some ground by reclassifying injuries as “long-term conditions”. Thus the true potential for preventing many injuries may be recognized and acted upon. As noted by Pless, effective responses benefit from the engagement of many sectors outside health. We could invest considerably more effort influencing and working directly with these sectors, including transport, housing and urban planning.

I wholeheartedly agree with the second conviction noted: research alone is futile. Similarly, action without sound evidence is at best wasteful and potentially harmful. Respondents to a survey of trauma centres in the United States of America noted that most injury prevention activities undertaken were not evaluated.³ Distressingly, an issue that receives scant attention is the likelihood that some strategies may increase socioeconomic and ethnic disparities in injury outcomes, as suggested by a study from New Zealand.⁴ It is clear that the “inverse care law” is pertinent both in and outside the health sector.⁵

Finally, getting the attention of governments distracted by the “credit crunch” will require more than ordinary zeal. Impoverished communities are disproportionately affected by the adverse impact of the recession. The children in communities caught up in this financial vortex are inevitably at greater risk of injury. Blaming the victims may never be easier.

It requires the courage of our convictions and much more to address the unjust inequalities in child injuries at global and local levels. Our capacity to act collaboratively, in and outside the health sector, has never been more important. ■

Funding: This work was funded in part by an International Collaborative Grant awarded by The Wellcome Trust (UK) and the Health Research Council of New Zealand.

Competing interests: None declared.

References

1. Gopnik A. Life changing books: Alice in wonderland. *New Scientist* 2008. Available from: <http://www.newscientist.com/article/dn13704-lifechanging-books-alice-in-wonderland.html> [accessed on 20 March 2009].
2. Billings J, Dixon J, Mijanovich T, Wennberg D. Case finding for patients at risk of readmission to hospital: development of algorithm to identify high risk patients. *BMJ* 2006;333:327. PMID:16815882 doi:10.1136/bmj.38870.657917.AE
3. McDonald EM, MacKenzie EJ, Teitelbaum SD, Carlini AR, Teter H Jr, Valenziano CP. Injury prevention activities in US trauma centres: are we doing enough? *Injury* 2007;38:538-47. PMID:17313948 doi:10.1016/j.injury.2006.11.020
4. Collins DC, Kearns RA. Geographies of inequality: child pedestrian injury and walking school buses in Auckland, New Zealand. *Soc Sci Med* 2005;60:61-9. PMID:15482867 doi:10.1016/j.socscimed.2004.04.015
5. Hart JT. The inverse care law. *Lancet* 1971;1:405-12. PMID:4100731

Stirring the pot

Joan Ozanne-Smith^b

The recently launched WHO/UNICEF *World report on child injury prevention*, reported reductions in the rate of child injury mortality by more than 50% in 30 years in high-income countries in the late 20th century.¹ The global challenge is to reduce injuries in all countries to similar levels, using existing and new knowledge over a similar or shorter timeframe. Sustaining effort in high-income countries, where injury remains the leading cause of death post-infancy, is equally challenging.¹

These goals should be feasible and a priority, since many known solutions are cost effective and have short lead times to measurable injury reductions. Yet, as Dr Barry Pless indicates, the necessary widespread support from ministries of health is lacking and there are challenges in the translation of research to implementation.

Injury is a health problem

While I agree with Dr Pless that injury is a health problem, I would add to his arguments and note some cautions. A coordination role by health is necessary since other ministries lack the overview capacity of the health ministry, and hence the capacity to coordinate action. Injury prevention requires health data to inform and drive prevention and to monitor trends. While the health sector is responsible for the treatment of injuries, it must also take direct responsibility for solutions where these fall within its jurisdiction (e.g. poisoning).

^a School of Population Health, Faculty of Medical and Health Sciences, University of Auckland, Auckland, New Zealand (e-mail: s.ameratunga@auckland.ac.nz).

^b Department of Forensic Medicine, Monash University, Melbourne, Vic., Australia (e-mail: joan.ozanne-smith@med.monash.edu.au).

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.^{2,3} 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,⁴ 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 2009,⁵ despite injury remaining the leading cause of death for Australians aged 1–44 years. Injury is also absent from major Australian prevention initiatives.⁶

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. ■

Competing interests: None declared.

References

1. Peden M, Oyegbite K, Ozanne-Smith J, Hyder AA, Branche C, Rahman AKMF, et al., eds. *World report on child injury prevention*. Geneva: World Health Organization & UNICEF; 2008.
2. Stuckler D, King L, Robinson H, McKee M. WHO's budgetary allocations and burden of disease: a comparative analysis. *Lancet* 2008;372 Issue 9649;1563-9. doi:10.1016/S0140-6736(08)61656-6 PMID:18984189
3. Lopez A. Health and health-research priorities: has WHO got it right? *Lancet* 2008;372 Issue 9649;1525-7. doi:10.1016/S0140-6736(08)61632-3 PMID:18984173
4. Sminkey LA. Ministry of Health focal persons for injury and violence prevention commit to increased action. *Inj Prev* 2006;12;270. doi:10.1136/ip.2006.012740
5. Albany P, Thenabadu G. *Child injury prevention: a public health issue?* Canberra, ACT: In Touch, Public Health Association;2009. Available from: www.phaa.net.au/intouch2009.php [accessed on 20 March 2009].
6. *New health taskforce on prevention - tobacco, alcohol and obesity priorities*. Canberra, ACT: Department of Health and Ageing; 2008. Available from: www.health.gov.au/internet/ministers/publishing.nsf/Content/mr-yr08-nr-nr046.htm [accessed on 20 March 2009].

It's all about money

Ian Roberts^a

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

^a London School of Hygiene and Tropical Medicine, Keppel Street, London, WC1E 7HT, England. Correspondence to Ian Roberts (e-mail: ian.roberts@lshtm.ac.uk).