PostScript

LETTERS

Community based interventions — less than perfect?

Thanks to Nixon *et al*¹ and Moller² for opening a dialogue on community based interventions. As learning organizations,³ we must continue to critically share evidence based and less than perfect experiments that face real world constraints. I describe here how a "successful" but imperfect start up enterprise⁴ enhanced that field.

From 1976-84, my co-investigators and I received piecemeal funding for community based childhood poison prevention demonstration projects. (Two of the 12 resulting publications were cited in Medline.) Our Monroe County Project (MCP) intervention did not meet Nixon's inclusion protocols as a true community study with cases and controls. Ours used a quasiexperimental design with school and parent education and the media to promote purchasing and using safer products. It was associated with a 66% decrease in hospital emergency department visits for those age 0-5 and 60% reduction in admissions compared with two pre-intervention years and to non-experimental comparison sites. Fewer accessible household toxic products and increased observed use of safety latches in homes of children under 6 were linked to significant knowledge gain and increased calls to the poison control center.

MCP findings of significant cost-containment: \$25 dollars per project dollar spent, prompted an amendment to New York State Public Health Laws resulting in a State Regional Poison Prevention Network. This provided \$4 million per year of Medicaid funding to designated regional poison control centers. It established regulations, annual reports, and an advisory committee.⁵ The MCP final report guided the Centers for Disease Control and Prevention's Poison Control Advisory Group's 1996 report for enacting a US regional poison control center enhancement funding law.

Experimental creative leadership during a period of downsizing resources can lead to significant scientific contributions to intervention systems tomorrow.⁶

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Sport safety research opportunity

A 2002 report of a United States Institute of Medicine workshop found that "no peer-reviewed studies have been published to support or refute the use of helmets in soccer and no authoritative medical or sports organizations have recommended the use of helmets in soccer".¹ However, in 2003, FIFA, soccer's international governing body, and three leading national sports bodies in the United States—US Soccer Federation, National Collegiate Athletic Association, and National Federation of State High School Associations—reversed their traditional ban on padded headgear and began to permit use by any soccer player.²

Before the widespread adoption of soccer headgear makes it difficult to evaluate this latest sport injury preventive measure,³ now is a good time to start soccer headgear research projects in one or more states and countries.

A search of Medline combining "Head Protective Devices" and "Soccer" returned only four articles in English from 1966 through March 2004. Neither the Computer Retrieval of Information on Scientific Projects database of the National Institutes of Health (CRISP, accessed 6 April 2004 at www.nih.gov) nor the ProjectBank database of the National Association of Injury Control Research Centers (accessed 6 April 2004 at www.naicrc.org) listed any current or recent investigations of soccer headgear.

Sports related traumatic brain injury is an important public health problem because of the large number of cases each year, the generally young age of cases at time of injury, and the potential cumulative effects of repeated injuries.⁴ Nevertheless, not all new personal protective equipment is efficacious and effective.

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About safety and safety promotion concepts

We were very interested in the comments of Nilsen *et al* on the "concept of safety" that appeared in a recent issue of *Injury Prevention*.¹ The authors first address safety from a theoretical point of view, then from the perspective of intervention. A 1998 monograph about the concepts of "safety" and "safety promotion" are among the main sources cited by the authors.² This monograph, an initiative of the World Health Organization (WHO), was prepared jointly by two WHO sponsored collaborating centers (Québec WHO Collaborating Center for Safety Promotion and Injury Prevention and WHO Collaborating Center on Community Safety Promotion, Karolinska Institute), and is available in .pdf format on the *Institut national de santé publique du Québec's* website, in English, at http://www.inspq.qc.ca/pdf/publications/150_SecurityPromotion.pdf and in French at http://www.inspq.qc.ca/pdf/publications/149_SecuritePromotion.pdf. This document deals with the concepts of safety and of "safety promotion". It offers a definition of safety promotion, and two distinct and complementary processes to promote its implementation: the problem based process and the setting based process. These two processes represent a "safety promotion approach". An example illustrating this approach is presented at the end of the monograph. Over the past few years, two articles were published about this monograph in scientific journals.^{3,4}

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BOOK REVIEWS

World Report on Road Traffic Injury Prevention.

M Peden, R Scurfield, D Sleet, D Mohan, A A Hyder, E Jarawan, C Mathers. (Swiss Fr 30/US \$27; in developing countries Swiss Fr 15.) Geneva: World Health Organization, 2004. ISBN 92-4-156260-9.

This impressive report aims to raise awareness about the extent of road traffic collisions

globally, to draw attention to their preventability, and to call for a coordinated partnership approach to addressing the problem. In its five chapters it gives in turn a comprehensive catalogue of the fundamentals of road safety, the impact of road trauma across the world, the key factors contributing to crashes and consequential injuries, successful interventions which have been applied (mainly in high income countries) to reduce the problem, with the final chapter containing conclusions and recommendations.

The report points out that over 3000 lives are lost daily to road traffic collisions. While a decrease in road deaths of some 30% is forecast in high income countries (HICs), projected trends in low and middle income countries (LMICs) foreshadow a huge increase in road crash mortality between 2000 and 2020. Hence the report quickly identifies that the priority globally should be effective interventions in LMICs.

In chapter 1 on fundamentals there is a recognition that "technology transfer from high-income to low-income countries needs to fit local conditions and should address research-based local needs". However chapter 4 on interventions, and to some extent the recommendations, seem to lose sight of this message and dwell upon technologies which have been evaluated only in HICs, as well as new strategies which could be quite unsuitable for LMICs. There is an impression that the HICs have got it right in terms of managing road trauma, and that LMICs should follow the interventions and principles developed in HICs (albeit adapted to local conditions and constraints).

There are, however, at least two key areas where HICs did not get it right during the last 50–60 years when road transport became both more available and cheaper and cheaper for the general population and industry. The first is that we have been reluctant to manage exposure to risk. As noted in chapter 4, exposure management is the least used of all road safety intervention strategies. This is because, in HICs, there has been a fundamental belief in the high value of personal motorised mobility, covering distance in the minimum time consistent with comfort. Thus constraints on exposure, and speed, have been given low priority compared to interventions which collectively could be seen as "patching up" the factors causing the crash and injury consequences of exposure and the kinetic energy derived from speed. It may not be too late for LMICs to challenge the unbridled growth in motorised transport, or at least to give much higher priority to managing exposure through land use policies and transport strategies in general (for example, separating road transport modes operating with disparate speeds and masses; discouraging unnecessary trips; and encouraging the use of safer and non-road travel modes). HICs have begun to challenge their own values in this area, as the costs of road trauma are valued at much higher levels than in the past. HICs should encourage LMICs not to make the same mistakes, by fully recognising the real costs of road trauma against the intangible values of some elements of motorised transport, especially personal mobility.

The second key area where HICs did not get it right is that investment in road safety research and development has been relatively small in comparison with other types of health loss (infectious diseases, etc). The report iden-

tifies that funding for interventions, even in the HICs most active in road safety, has been scarce. Road safety efforts in HICs have failed to match the severity of the problem and continue to do so. There are good historical reasons why this was the case, including belief in the accidental nature of the problem and fatalistic acceptance of its inevitability, but the situation has changed in HICs. LMICs need to really believe that the problem is preventable, that it is worth the substantial investment in research and research based action programs, and that successful interventions from HICs cannot simply be transferred to each LMIC without research and development in local conditions. It needs to be recognized that this investment in prevention will need to be substantial, but it is at least as justified as other health program investments because of the enormous and increasing costs of road trauma in each LMIC.

The report highlights the road safety model of Victoria, Australia as a good example of a cooperative partnership which led to substantial road safety benefits. There were attempts to transfer the Victorian model of strong traffic law enforcement supported by high profile mass media publicity to KwaZulu-Natal (KZN) province in South Africa during the late 1990s. There was little effort to adapt the successful Victorian interventions to South African conditions and constraints. Perhaps the advisers (of which I was one) misinterpreted KZN as ready for an HIC-type road safety program. The initial years of Project Victoria (later renamed "Asiphephe") in KZN saw a 31% reduction in road trauma (deaths and injuries) between 1996 and 1998, but by 2001 road trauma had returned to 1995 levels. Perhaps one of the reasons the government and population of KZN lost their commitment to Project Victoria (J Bodinnar, personal communication) was that they saw it as essentially an HIC approach, not adapted or suitable for local conditions or beliefs.

This is not to suggest that partnerships of public and private agencies are not a key factor in coordinating the range of organisations which would have responsibilities and resources for road safety in a typical LMIC. The failure in KZN was essentially due to the lack of investment in research and development in local conditions to provide the background for the transfer of principles, and perhaps successful interventions, from an HIC. Partnerships, and shared responsibility for the road safety "system", are key elements of Sweden's "Vision Zero" strategy which is being seriously considered in HICs to guide their future directions. Perhaps many LMICs would find the ultimate goal of zero road trauma intimidating and unrealistic given their current resources. The target should not distract attention in either LMICs or HICs away from the systematic and cooperative aspects of the Swedish strategy.

Notwithstanding these concerns about the LMICs making the same mistakes as the HICs if they follow them uncritically, the report is an excellent overview of what has been effective in reducing road trauma in HICs. The report also provides the basis for fundamental strategic thinking in the field, armed with which many LMICs may be able to reduce more quickly or even avoid their burgeoning road trauma problems.

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Drive On! A Social History of the Motor Car.

L J K Setright. (Pp 405; £25 hardback.) London: Granta Books. ISBN 1-86207-628-6.

This is an entertaining, idiosyncratic history of the motor car written by a long time motoring writer. It looks at the way cars changed history—examining change first of all by decade, then by associated issues such as the effect on cities and where to stop, then according to particular technical facets from hand cranking to computer control. For those interested in injury prevention, the most significant part of the book is that a history of the motor car can be written without a single indexed reference to seat belts, airbags, safety, alcohol, or traffic lights, slighting and dismissive references to seminal work such as Nader's *Unsafe at Any Speed*, which is referred to as a "snide red rag" of a book, and no understanding of the huge social and economic cost associated with road death and trauma.

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Twenty Years As A Police Surgeon.

John Birrell. (Pp 104; Aus\$29.95 paperback.) Brolga Publishing Pty Ltd, 2004 (P O Box 959, Ringwood, Victoria 3134; email: markzocchi@brolgapublishing.co.au). ISBN 1-920785-24-8.

This is a memoir that reflects one of the great stories in injury prevention—the 70% fall in road traffic deaths in Victoria. Dr Birrell was at the centre of developments in road traffic injury reduction in Victoria, from the early days in the late 1950s to the period when it had become clear that the modern epidemic of road injury could be contained and the large reductions had begun. It deals with the efforts to get seatbelts installed and used, the enormous struggle to overcome the conspiracy of silence and to get road death taken seriously and, above all, the battle to contain the effect of alcohol as a component in road trauma. Although firmly located in Australia, the book is noted here because it is one of very few to focus on the *how* of injury prevention, on how interest was fostered and on how interventions and policies were developed, checked, and changed until the death rates came down.

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CORRECTION

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Reality check: using newspapers, police report, and court records to assess defensive gun use

The above paper was published in the April issue (*Inj Prev* 2004;10:96–98) and the authors would like to correct some minor errors. In the second paragraph of the discussion the authors stated "The newspaper reported two such homicides (both by security guards, one off-duty and the other on-duty)"; this should have read "...one such homicide...". In the abstract and key points where it states that there were two DGUs [defensive gun uses] involving killing assailants it should read "Two DGUs involving killing or wounding assailants".