injury

P R E V E N T I O N

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Editorial

Deeper meanings

One of my favourite cartoons is by the subtle, well known cat artist, Kliban. It shows a cart loaded with ordinary wheels being pushed by two men. The punch line is that the wheels *in* the cart are round, whereas those *on* the cart are square! It took me a while to figure out what the deeper meaning was, but when I succeeded I realized it was a clever metaphor for so much of what we do. In particular, it applies to many papers we publish whose messages for those responsible for prevention are often hidden or obscure. This happens in spite of my persistent request that authors conclude with a section entitled, 'Implications for prevention'. Many ignore me; others try and fail; a few succeed.

Every paper we publish is intended to contribute in some way to our understanding of injuries and ultimately, to our ability to prevent them. This is our *raison d'être*. But authors' difficulties in teasing out the prevention messages are understandable. Some problems arise from researchers' excessive modesty; the view that no single study 'proves' anything. Others are inhibited by the scientific notion that frowns on making recommendations that are not directly related to their results. This is most often, and most understandably, the case when the purpose of a paper is to lay a foundation by defining the magnitude of a problem, to identify those at greatest risk for a particular injury, or to describe a new method of enquiry. It is a long leap, often of canyon-like proportions, from such data to finding immediate steps for prevention. But part of that leap is warranted—even if it occasionally means falling off the ridge.

To assist those reluctant to make such jumps, I've under-taken what might best be described as a mental exercise (much safer than actually hurling over canyons, to be sure). The task I set myself is to re-examine each of the papers in this issue and speculate on their deeper meanings.

First, we have the description by Bablouzian *et al* of their evaluation of a community based program (p14). The key message here is that such studies, in spite of falling short of using an ideal design (a randomized controlled trial), are reasonably easy to do, providing home visitors, in this case, public health nurses, can be enlisted to make the needed observations. It seems to me that in most countries this should be feasible providing injuries are viewed as

important a public health issue as others that now occupy nursing time. The other important message, echoing those of others, is that this relatively low keyed program derives part of its effectiveness by distributing safety supplies and not expecting parents to purchase them. This is analogous to providing vaccines when faced with an epidemic, or, indeed, simply to ensure proper immunization levels in the population as a whole.

Campbell, MacDonald, and Richardson remind us of the still unresolved problem affecting in-car safety (p17). As the title suggest, this remains an 'important and under recognized road safety issue'. The solutions to this problem are more parent education and more consistent, vigorous law enforcement. The latter undoubtedly requires an effort to educate police and road safety officers. This paper offers an essential piece of evidence, certain to shake the complacency of any who think the issue of occupant safety has been vanquished. There is no reason why a first step could not involve sending a reprint of this paper along with a strongly worded letter from the director of a prevention programme to the police, insisting on immediate and consistent tightening up of enforcement procedures. Clearly, the additional steps recommended, such as improved instruction to purchasers and retailers, as well as better collaboration between car manufacturers and those who produce restraints, are equally valuable. These steps can be catalysed by sensible lobbying and by capturing the attention of the media.

Morrongiello and Bradley's fascinating paper is vintage 'basic research' (p23). It shows what most parents have long suspected—that older siblings influence the behaviour of their younger brothers and sisters. Obviously this persuasive power could be harnessed to enhance prevention, and just as is shown here, to increase risk. It does not seem to be going too far to suggest that a preventive program be devised that recruits older siblings, explains to them the influence they have, and then provides them with the tools, through training, to ensure that that influence is used to foster safe behaviours among their younger siblings. The tools could well be based on the scenarios developed for this project, extended to other situations, and used in classroom settings as safety exercises.

The report by Evans and Kohli deals with the differences between the knowledge, attitudes, and practices of parents

at opposite ends of the socioeconomic spectrum (p29). Despite concerns about the methods used, assuming the results hold following further study, they should lay to rest, in the words of one reviewer, 'the widely held but unsupported notion that feckless parents and unattended children are a major contribution to the increased injury rates of socio-economically disadvantaged children'. What this means in terms of promoting prevention is that those still inclined to blame the victim—to assume that less well educated families or those with lower income must be prodded still further to ensure their child's safety—should focus their energies elsewhere. Rather, the message is that it is those responsible for the homes and neighbourhoods where poor children live who must be pressurized to ensure the presence of safety measures equal to those provided for the rich. Whether this is best done in a targetted or global manner remains uncertain.

Hwang, Stallones, and Keefe describe injury deaths in rural communities in Colorado (p35). The findings make the important point that there are special risks with which children in these communities must contend. It is evident that what works in urban communities must be adapted for rural children or that something radically different must be developed. As in most communities, traffic is a major problem as shown in the twofold increase in risk of motor vehicle accident death rates. Those responsible for road safety in rural areas must learn about the factors responsible for this increased risk: higher speeds, road design, lack of lighting, weather conditions, alcohol, and decreased access to emergency medical services. Once these are understood, safety officials in these areas must take steps to overcome these problems. One specific recommendation is to improve the emergency medical services in country areas, as well as reduce, not increase, speed limits on these roads. As is true of so much in the field of injury prevention, efficacious measures applicable to these and the other problems highlighted in this paper, such as drowning and firearm deaths, are well known. What remains is for a strong advocate to press for their adoption.

Another major finding, in this case dealing with a methodologic issue of general interest, is found in the report by Thompson and her colleagues. Injury prevention researchers are constantly looking for measures that help ensure that comparisons between injured and non-injured victims, are valid. Their demonstration that children's estimates of speed are accurate for bicyclists' head injuries means that these estimates could be used as a proxy for severity, and thus help ensure that the groups are otherwise similar. This takes us one step closer to removing often

foolish criticisms of studies demonstrating the effectiveness of helmets. Furthermore, if, as the authors suggest, self reported speeds is shown to be a 'risk factor for crash and injury' this could lead directly to strategies to decrease speed and to separate slower from faster cyclists. Both are novel ideas that deserve careful consideration.

Kim and colleagues take this further by demonstrating that the use of copayments, in this case a \$5.00 charge for a helmet, makes programmes aiming to increase helmet use among low income children much more feasible (p38). The central finding that the small payment does not affect wearing rates is of great importance. It permits programmes with limited budgets to make helmets more widely available without suffering pangs of conscience that by requesting this small payment, many families will be deterred from obtaining helmets for their children. The findings are immediately applicable and should result in a rapid increase in helmet use rates among low income families.

Finally, the paper by Thein *et al* on baby walkers describes a problem well known to most readers, but with a novel twist that may or may not be supported by further studies. The twist is that in addition to the injuries associated with walker use, there may be another price paid—developmental delay. But the preventive solution for families in Singapore is as straightforward as it is in the US, Canada, or the UK—either ban this dangerous product or require manufacturers to produce a safer model (that would probably prove so unappealing that few parents would choose to purchase it). How this can be achieved is simple: the authors should take their findings to the health authorities, point to the preventive steps taken elsewhere, and insist that these be followed so that children in Singapore are no less well protected than those elsewhere.

One theme running through all these papers is the need for increased advocacy by prevention programs. They must learn to use the media as effectively as Chapman does (see p69). Letters to the editors of newspapers and well written op-ed columns can turn the tide of public opinion, and thence, political opinion. His book, *The Fight for Public Health*,¹ is a 'bible' for those so inclined.

Another theme is the need for programme persons to learn about and use the simple, elegant 'new technologies' for program evaluation in such matters as helmet use. Finally, we all need to be encouraged to adopt more effective and efficient ways of making safety devices more accessible to low income families.

I B PLESS
Editor

1 Chapman S, Lupton D. *The fight for public health*. London: BMJ Publishing Group, 1994.

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