

REGIONAL REPORTS

News from India and China

Morbidity and mortality due to injuries have been officially recognised as significant public health problems in the high income countries (HICs). However, this is not true for the low income countries (LICs). This lack of recognition is assumed by many to be because of an absence of data regarding injuries and because of the prevalence of a "fatalistic attitude" in the population of these countries. Both these assumptions are probably wrong. If you examine the contents of newspapers in LICs, deaths due to injuries are clearly given a great deal of importance by the public and officials and these newspapers carry frequent editorials regarding the lack of safety in their respective societies. These newspapers also report the concern that citizens show by demanding safer roads, schools, and homes. This concern is expressed in the form of letters to the editor, formation of community groups to tackle the problem, and protests in response to tragic events. Some studies also report that poor people spend enormous amounts of money (as a proportion of their incomes) on the treatment of their injuries and other ailments.

This evidence clearly shows that injuries are recognised as a serious problem by society and that the citizens at large do not have a fatalistic attitude toward life. If they did, they would not end up spending so much to have their injuries treated. However, what is true is that LICs have not been able to institute effective programmes for injury control. This is largely because problems in LICs are very complex and there is very little precedence for effective safety policies and interventions that suit low income societies. In addition, LICs also suffer from a lack of expertise and specialised institutions in the area of injury control. Unless local expertise is developed, promoting sustainable and effective injury programmes will be difficult. It appears that attempts are being made in some countries of Africa and Asia to move toward this goal of strengthening local expertise.

Mr Hua Yong Hong of the Traffic Management Research Institute of the People's Republic of China organised a week long seminar on road traffic safety and congestion last October. The seminar was held in Hangzhou and attended by senior police officials representing the different provinces of China. The lecturers at the seminar included experts from China, Japan, and India. The police officers from different provinces made presentations on specific issues concerning safety and traffic congestion in their specific locations. With increases in motorisation, there are serious problems concerning pedestrians and bicyclists of which a large number constitute children. The conflict between the need for providing facilities for faster motorised traffic and ensuring the safety of vulnerable road users became evident in the discussions. At present there are clearly no clear guidelines for the resolution of these problems except the control of vehicular speeds through traffic calming and police enforcement. However, much more work needs to be

done to evolve location specific designs and policy measures.

An International Course on Injury Control and Safety Promotion was held in the first week of December in Delhi, India. The week long course was organised by the Transportation Research and Injury Prevention Programme of the Indian Institute of Technology, Delhi, in collaboration with Department of Public Health Sciences, Karolinska Institute, Sweden. The course was sponsored by SIDA, Sweden, and WHO and attended by 26 participants from 11 countries. The faculty included Leif Svanström, Ragnar Andersson, and Karen Leander from the Karolinska Institute, Dinesh Mohan, Geetam Tiwari, Mathew Varghese, Imrana Qadeer, and Rajesh Patel from IIT Delhi, and Larry Berger and Rick Smith from the USA.

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A funny thing happened on the way to the meeting: on guns and triggers

Two women who were attending the 1997 American Public Health Association (APHA) annual meeting in Indianapolis were shot in a restaurant while waiting to be seated. A man with a registered .32 caliber handgun was leaning over to pick something up from the floor when a weapon fell out of his pocket, dropped on the floor, and fired two bullets. In the gun world, this is known as a drop-fire, a close kin to a bump-fire, both due to defective trigger mechanisms. When a child chokes on a small ball, or loses an eye from a toy rocket, the regulatory machinery of government is immediately engaged. No such scenario was set in motion by this shooting in Indianapolis. Although the Bureau of Alcohol Tobacco and Firearms regulates the sale and interstate commerce in handguns, it has virtually no authority to set standards for the design or safety of domestic handguns. And firearms are among the few products specifically excluded from the jurisdiction of the Consumer Product Safety Commission. This is despite the fact that guns are second only to automobiles as the consumer products most frequently responsible for death in the US.

Children under the age of 15 in the US are 12 times more likely to die from firearms than in 25 other developed countries and the rate of unintentional firearm injuries in this age group is nine times higher than in the comparison countries.¹ A study of US handgun owners by the National Institute of Justice estimated that there are 65 million handguns in circulation in the US. This same study found that 55% of handgun owners keep their guns unlocked and 30% keep them unlocked and loaded.² The deadly combination of accessible handguns and children is underscored by a recent study which found that 25% of 3-4 year olds and 70% of 5-6 year olds have the finger strength and coordination to fire most of the commonly available handguns in the US.³

There are a number of effective countermeasures to unintentional firearm injury to children. The most obvious, and the one recommended by the American Academy of Pediatrics, is to keep guns out of the home. Locked storage boxes for handguns and separate locked storage of ammunition are others. A properly designed safety lock, a

device that prevents the trigger from moving without a key or other unlocking device, can also be an effective countermeasure. On 7 October 1997, President Clinton announced that eight major handgun manufacturers have agreed to provide child safety locks on all new handguns they sell by the end of 1998. While this is an important first step, the voluntary nature of the agreement, the application only to new handguns, and the lack of regulatory power over the design of the safety locks and the firearms themselves, raises the concern that this is a token action which will not translate into many young lives saved.

The two APHA participants survived, sustaining only minor injuries. Would that this were true of the 200 children killed unintentionally and the 800 children intentionally killed by guns in the US each year.

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- Centers for Disease Control and Prevention. Rates of homicide, suicide, and firearm-related death among children—26 industrialized countries. *MMWR Morb Mortal Wkly Rep* 1997;46:101-5.
- Cook PJ, Ludwig J. *Guns in America: national survey on private ownership and use of firearms*. National Institute of Justice: Research in Brief. May 1997.
- Naurekas SM, Galanter C, Nareckas ET, Donovan M, Christoffel K. Children's and women's ability to fire handguns. The Pediatric Practice Research Group. *Arch Pediatr Adolesc Med* 1995;149:1318-22.

Injuries to young men in Australia

The National Health and Medical Research Council has released a major study *Unintentional Injury in Young Males, 15 to 29 Years*.¹ The terms of reference of the working group were to undertake a review of available data and contributory factors and to identify, review, and assess means of prevention. The report sets out the size and nature of the injury problem; the influences on injury, such as sociocultural factors, alcohol, risk behaviour; countermeasures; policies for youth and injury; and recommendations.

The problem

- Young men have four times the rate of injury death and three times the rate of hospitalisation as young women the same age;
- Injury is responsible for 1600 deaths and 60 000 hospitalisations among these young men each year; death rates for all injuries are 77.8 per 100 000 and unintentional injury death 47.7 per 100 000;
- Transportation is the leading cause of death (34.5 per 100 000), pharmaceuticals poisoning is next (3.2 per 100 000, one tenth the rate), with drowning close behind (3 per 100 000);
- Hospitalisations are caused by transport injury (rate of 684.5 per 100 000), falls (144.8), sport and pharmaceutical poisoning (140.7);
- The leading causes of presentation to emergency department for injury are occupational injury and sports related injury;
- Those with higher injury risk rates are those in rural and remote areas, Aborigines, and Torres Strait Islanders, and those in certain occupations such as farm workers, factory hands, plant operators, etc;

- Young indigenous males are more than twice as likely to die from injury as their non-indigenous counterparts.

Influences on injury risk

The report notes that raised injury patterns are seen across a wide spectrum of causes and that the dominant cause of unintentional injury death, motor vehicle crashes, have been the subject of extensive intervention, but that other causes are not documented well and associated with limited injury prevention activity.

The link between injury and lifestyle/behaviour and exposure to hazardous environments is reflected in the literature. A complex interaction of precursors such as thrill seeking, poor risk perception, risky cultural norms, inexperience, stress, and alcohol consumption is known about but untangling how they operate together has not yet been done. Similarly it is known that there is an association between injury and socio-economic and education disadvantage, but the details of how and why are unclear.

Strategies

The report analyses a range of interventions at the broad and the particular level that have been used to address injury.

There is strong supportive evidence for the effectiveness of certain personal protective equipment in reducing injuries including seatbelts, motorcycle helmets, bicycle helmets, and eye protectors in squash. There are many strategies found to offer promise but for which current evidence is inadequate.

Conclusions

The report identifies a range of interventions that can be put in place, research and evaluation that needs to be undertaken, key policy and structural issues requiring attention, and the need for further development of prevention oriented surveillance of injury.

It is noted that important questions of how to address the issue of injury among young males remain to be answered and the need to work systematically to deal with research, implementation, and decision making infrastructure is stressed.

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1 National Health and Medical Research Council. *Unintentional injury in young males, 15 to 29 years. Report of a Working Party of the Health Advancement Standing Committee.* Canberra: Australian Government Publishing Service, 1996.

Youth suicide in New Zealand

There has been considerable concern in New Zealand in recent times over a jump in the suicide rate for young people in the 15–24 age group. The 1995 figure of 156 deaths represented a rise over the 137 in 1994, which in itself was up on the stable figures (125 to 130 per year) of the preceding years. The rise was marked in young men aged 15–19 years and among women 15–24 years.

The age specific suicide rates in 1995 were: males 15–19 years 34.5 per 100 000; males 20–24 years 55.7, and total 15–24, 45.4 per 100 000. The figures for females were, respectively, 11.1, 14.6, and 12.9 per 100 000. Suicide is higher among Maori females than non-Maori females, higher

among Maori males 15–19 and lower among those aged 20–24 years.

The rise in suicides was the subject of much public discussion and led to the formation of Youth Suicide Prevention Strategy, the introduction of a new mental health awareness curriculum in schools.

In the past the law has limited publication to name, address, and occupation. Since 1996 coroners have had discretion over the details permitted to be published concerning suicide, but this power is rarely used. Following a number of suicides some coroners have suggested that the practice should change because the right of the public to know and the usefulness of research outweigh the right of the grieving family to privacy.

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Safe medicines campaign in Glasgow

Greater Glasgow Health Board, the statutory organisation responsible for commissioning health services in Scotland's largest city, became increasingly uneasy in 1997 at the rising tide of hospital admissions of children who had ingested medicines. In response, they launched an end of the year awareness raising campaign jointly with the Royal Pharmaceutical Society of Great Britain. The initiative aimed to focus on the dangers to children, particularly those under 5, of accidental poisoning and to promote the safe storage of medicines at home. A key message was that all children, regardless of social background, are potentially at risk. A packed press conference in November heard the head pharmacist of the Royal Hospital for Sick Children, Yorkhill, sheepishly confess that his own pre-school child had found and swallowed some paracetamol tablets!

The campaign received widespread exposure in the local media, though its impact on the incidence of ingestions remains to be assessed. Health promotion and public relations experts drew their background information from a number of sources including the recently established Yorkhill version of Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP). CHIRPP was able to confirm a real rise in children presenting to the accident and emergency department with ingestions rather than simply an increasing tendency of clinicians to admit such children to the inpatient wards. CHIRPP will also doubtless prove an invaluable means of evaluating the success of the campaign. This has yet again highlighted the crucial importance of having an efficient local injury surveillance on hand to provide appropriate information to safety professionals.

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Southern Africa report

One aspects of paediatric trauma medicine that really appealed to me when I entered this field just over 10 years ago, was the challenge of non-operative management of blunt injuries. Like most colleagues, I certainly have no deep aversion to the blood spattered, adrenaline rich milieu of emergency surgery, but when working in adult trauma units, I had found the endless routine of operating on victims of gunshots and knife attacks both

predictable and depressing. At Red Cross Children's Hospital, my happy experience has been to deal mostly with blunt injuries, usually the result of falls or traffic collisions, and where clinical diagnostic ability and the art of multi-disciplinary management are more important than speed or manual dexterity. In recent weeks and in spite of government efforts to control handgun ownership (as outlined in my last report), I have had no choice but to dust off my scalpel, don the bloodproof apparel known as "universal precautions", and spend long hours in the operating room repairing the ugly damage caused by flying bullets—always uglier when it lacerates the flesh of young children. In preparation for this summer holiday season, I have restocked my unit with large bore chest drain catheters, high flow intravenous infusion sets, instrument packs for resuscitative thoracotomy, and an autotransfusion device—all of which I thought I'd left behind years ago at the adult hospitals where knife and gunshot wounds are pretty much stock-in-trade. With heavy hearts, my staff and I roll out the red carpet for a new problem in the field of childhood injury—while prevention initiatives still struggle to make an impression on the old ones.

The official South African figures for road traffic injury in 1997 are horrifying: 517 669 collisions, 22 757 serious injuries, and 5146 deaths. Against this doom and gloom, the "Arrive Alive" traffic safety campaign launched countrywide throughout South Africa two months ago looks to be one that means business. In the course of regular weekend "blitzes" in the Western Cape alone, 87 000 motorists have been fined for a variety of misdemeanours, and the number fined for driving under the influence of alcohol (total = 887) has dropped dramatically. Although 9508 fines were handed out in the same period for failure to wear seatbelts, there has not been a single conviction for failure to restrain children, most likely because South African laws governing use of child restraints are too anaemic to be worth enforcing. CAPFSA hopes to make a worthwhile contribution to child passenger safety in 1998 by launching a long overdue child restraint loan scheme based in Cape Town. In reaching this point, our sincere thanks go out to all our sister organisations who inundated us with invaluable literature accumulated in the course of setting up similar schemes in their own centres.

Lastly, Victor Nel and colleagues at the University of South Africa are to be congratulated for convening the successful SAFE-COMM6 meeting at Eldorado Park in October 1997. The African continent in particular was well represented in terms of delegates and subject matter, as befits a meeting entitled "Consolidating communities against violence".

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PEDNET

A recurring theme among pedestrian advocates is the lack of anger at pedestrian injuries, and the tendency to blame the victim, especially children, for their injuries.

Sally Flocks reported on a 4 year old killed on an Atlanta residential street. The child was struck by a police officer speeding at 45 mph for no apparent reason. (The officer has been charged with vehicular homicide.) Two years ago, the neighborhood requested traffic calming for that particular street but the City turned them down. Curiously, the mayor said at the funeral "in many ways, this is the worst kind of tragedy, because we have no one to be angry with". Sally said that before the mayor's comments, she had two places to target her anger, but now she has three. Mike Mott suggested a fourth target for Sally's anger—"NHTSA, that spends millions to protect those inside a vehicle and nothing to protect those outside the vehicle".

While that comment may be a slight exaggeration, the US government policy toward child pedestrian injuries appears to focus on altering the child's behavior. PEDNETers posted the Secretary of Transportation, Rodney Slater's speech before the National Pedestrian Conference. In it, he talked about his own 4 year old. He relayed how he teaches her to "stop, look, and listen" before crossing a street. PEDNETers are well aware that this form of intervention will be no more successful that it was in Atlanta. They know the limits in cognitive and physical development of children and realize the futility of expecting a 4 year old to "stop, look, and listen".

A shift in public policy may be forthcoming. PEDNETers discussed a Centers for Disease Control and Prevention (CDC) report on Halloween child pedestrian injuries.¹ (In the US children walk door-to-door asking for candy.) The CDC noted the injury rate quadruples on that day and discussed the developmental limits of children in dealing with traffic. However, even after saying kids are not ready for the demands of traffic, six of the CDC's eight "Safety Tips for Halloween" were aimed at altering children's behavior (for example "Children should cross streets at the corner..."). Only one was aimed at motorist's behavior ("Motorists should drive slowly..."). Although the CDC report received media attention, the safety tips were reported without the discussion of the limits of trying to adapt children to traffic's requirements.

From a pedestrian advocate's point of view, this myopic focus on the victim seems unique to and endemic in efforts to eliminate motor vehicle related injuries. For starters, even the classification of motor vehicle injuries separates by the activity of the victim. (It's hard to imagine gunfire injuries separated by the victim's action—if the victim was smoking when shot, would it be a tobacco injury?) If a child is hit by a car mid-block on a residential street while walking, the injury is classified "pedestrian". If that child is bicycling, the injury is classified "bicycle related". In both bases, the collision results from a child playing in or crossing a street, while simultaneously a motorist traverses the street. Both are legal actions, but a victim focus results in these collisions being termed "dart out". Any disinterested party would recognize that the motorist, not the child, is the party going too fast for the situation. Yet injury control efforts too often address only the victim. Victim orientated classifications obscure the actions (and responsibilities) of the agent in the injury, the motorist.

Splitting the injuries by the action of the victim also obscures the relative magnitude of the injuries. While motor vehicle related injuries are the leading cause of death for children

in most countries, many, if not most of the injuries occur outside of the car. Splitting the "child struck by motor vehicle" injuries by the action of the child results in prevention programs misdirecting their efforts. Pedestrian advocates believe much more effort is needed in making the streets safe for children.

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¹ Centers for Disease Control and Prevention. Childhood pedestrian deaths during Halloween—United States, 1975-1976. *MMWR Morb Mortal Wkly Rep* 1997;46:987-90.

LETTER TO THE EDITOR

Fatal and non-fatal farm injuries

EDITOR,—In a recent issue of *Injury Prevention*, in an article on fatal and non-fatal farm injuries, the organization Farm Safety 4 Just Kids is mentioned as an example of a grassroots group working on children's farm safety.¹ Dr Rivara is a fine researcher, and has worked with Farm Safety 4 Just Kids on other analyses, and we are glad that you published his article.

The board of directors of Farm Safety 4 Just Kids, however, asks to be placed on record with your journal to explain the last phrase in paragraph 2 of the introduction: "Grassroots groups, such as Farm Safety 4 Just Kids, have been formed to increase public awareness of the magnitude of the problem, conduct public education, and lobby for legislation and regulation". Lobbying for legislation and regulation is an activity that, while not prohibited by our non-profit 501 c3 status, has not been a major component of our work. The Farm Safety 4 Just Kids board of directors has been sensitive to the variety of mixed reactions and opinions there are to such activities as legislation and regulation by an organization that is working directly with farm families.

Thank you for allowing us to further explain our organization in addition to the information included by Dr Rivara.

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¹ Rivara FP. Fatal and non-fatal farm injuries to children and adolescents in the United States, 1990-3. *Inj Prev* 1997;3:190-4.

BOOK REVIEWS

Child Development and the Aims of Road Safety Education—A Review and Analysis. By J A Thomson, A Tolmie, H C Foot, and B McLaren. (Pp 131; £19.00.) Department of Transport Road Safety Research Report No 1. Norwich: HMSO,

1996. ISBN 0-11-551-797-9.

This book challenges the widely held views in road safety that young children are biologically incapable of coping with the road environment, until an appropriate stage of psychological development is reached. It thus provides an informative framework for a debate on the aims and objectives of road safety education and usefully contributes to the debate on the relative role of education, engineering, and urban planning methods in injury prevention.

The report was commissioned by the Department of Transport from a team of developmental psychologists at the University of Strathclyde, Glasgow, Scotland. The first author, James Thomson has been actively involved in the development and evaluation of both experimental and operational road safety programmes, but the report ranges more widely than the authors' own programmes.

The book comprises five main sections: (1) aims and objectives of road safety education, (2) current methods employed in road safety education, (3) theories relating to child development, (4) implications of these theories for training, and (5) conclusions and recommendations. A clear and concise executive summary is provided and there are useful summary sections for each chapter. The bibliography of 220 references draws widely from the field of development psychology. One criticism here is that more attention is given to the road safety literature from Europe than from the USA or Australia. The report, however, usefully summarises the developmental psychologist perspective on this issue, is (thankfully) free from jargon, and very clearly written. It provides a work of some scholarship and careful argument.

The aims and objectives of current road safety education are explored in chapter 1. What emerges is the lack of concrete objectives in most programmes. Even when more precise objectives are defined, the majority are concerned with knowledge and attitude change, rather than behaviour. As there are no direct links between knowledge change and behaviour, the validity of most road safety education can be questioned. The authors go on to analyse different components of the complex pedestrian task: detecting the presence of traffic, making visual timing judgments, coordinating information from different directions, and coordinating perception and action. They discuss how such skills develop in children and the level of skills that can be expected in children of different ages. They cite convincing evidence that children's performance on a range of clearly defined pedestrian skills can be accelerated, providing appropriate training is given.

The issue of appropriate training is examined in chapter 2. A useful distinction is made between the content of a programme and the methods employed: programmes can fail if the content is inappropriate and/or if the methods are inappropriate. What methods have been used in this field? Classroom based verbal methods, books and printed materials, films and videos, and practical training are all analysed. An interesting observation is that video techniques can offer greater flexibility than films, particularly if they are tailored to children's own locality and incorporate children as subjects. The feedback capabilities of such local videos may be worth exploring further. But the report particularly favours the use of practical skills training, involving

active behavioural participation and their arguments is convincing:

"Skiing or swimming, driving or learning to ride a bike all require practical experience: no-one has ever learned to do these things just sitting at a desk. Yet this is precisely how we expect young children to cross the road" (p 59).

Chapter 3 provides the theoretical underpinning of why practical skills training is effective, concentrating in particular on the theories of J J Gibson, Jean Piaget, and L S Vygotsky. Skills and strategies cannot be taught solely by verbal means but need to be built up from their constituent behaviours. There is strong evidence that learning is more flexible than earlier supposed, particularly when appropriate interventions are employed and the authors conclude that appropriate training could begin as early as 4 years of age.

The implications of child development theory for training are discussed in chapter 4, with peer tutoring, adult led training, and peer collaboration being considered. The first two of these methods stem from a Vygotskian approach and are likely to be best suited to the learning of skills and strategies. Peer collaboration, on the other hand, is more in line with Piagetian theory and would appear to be more useful in the provision of conceptual understanding. The authors believe that successful training needs to include both approaches.

The final chapter summarises the context of the report and produces a range of recommendations for both practical training and for future research.

One reservation about the report is that it is not overtly systematic: it does not set out its criteria for the way its evidence was obtained nor its inclusion criteria for how studies were selected. Is there a literature that does not support the conclusions, which has not been cited. It would have been useful to have had the study findings summarised in accompanying tables.

Childhood injury prevention requires input from a wide range of disciplines and this contribution from the developmental psychology field is a useful addition to the literature, particularly in its attempt to provide a more theoretical base to the subject. Attention to the nature of the messages, more precise objectives, and the use of appropriate methods are important when we consider the wider debate on the role of education in injury prevention. Pessimism about the limitations of education may not be wholly justified if we design more *appropriate* educational interventions.

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Reducing Firearm Injury and Death: A Public Health Sourcebook on Guns. By Trudy A Karlson and Stephen W Hargarten. (Pp 172; hardback £39.95/paperback £19.95.) Rutgers University Press, 1997. ISBN hardback 0-8135-2420-2/paperback 0-8135-2421-0.

Effective injury control requires accurate information. For injuries caused by firearms, that information includes not only an understanding of the research and policy literature, but also a basic knowledge of how firearms work. This is particularly true for interventions that focus on the product—the

firearm—rather than on changing the behavior of victims or perpetrators of violence. But some injury control researchers and advocates did not grow up in a household where firearms were present, and have been forced to learn how guns work, if at all, in a piecemeal fashion from sources not designed for a public health audience. With *Reducing Firearm Injury and Death: A Public Health Sourcebook on Guns*, authors Trudy A Karlson and Stephen W Hargarten remedy this gap in the public health literature.

After a brief chapter summarizing the scope of the firearm injury problem, the book's strongest chapters follow. In clear language, without jargon, the authors explain the historical development of guns and ammunition, the different types of modern firearms, and how differences in design affect the likelihood or severity of injury. One secondary insight from these chapters is just how pervasive firearms are in the culture and language of the US. Ubiquitous phrases like "flash in the pan", "half cocked", and "hair trigger" all derive from the design or function of firearms.

Especially valuable are the book's frequent asides explaining the "Public health implication" of a particular aspect of firearm design or operation. These sections speak directly to public health practitioners, providing a clearer connection between the information being conveyed and opportunities for prevention. A remarkably prescient example is the authors' suggestion that, given some firearm's unfortunate propensity for firing when dropped, perhaps only those guns that can pass a "drop test" should be eligible to be carried concealed. Had the state of Indiana accepted this suggestion, perhaps two women attending the November 1997 Annual Meeting of the American Public Health Association in Indianapolis might have been spared needless injury. In other areas, where adequate data are not yet available, the authors effectively explain what questions about the contribution of gun design to death and injury we could answer with better surveillance systems.

Chapters that follow, describing "Where guns come from", and "How guns are currently regulated", are somewhat less effective. Although the overviews these chapters provide can be useful, this is vast territory not always well served by superficial treatment. The authors recognize this limitation, however, and also refer readers to other, more detailed sources. These chapters are also less valuable for non-US readers. While the basics of gun design and operation do not change from country to country, injury data, gun policy, and opportunities for prevention can be quite different.

The book concludes with a chapter explicitly devoted to strategies for prevention. Consistent with the authors' product modification focus, these strategies build on the information provided in the book's early discussion. The relative political feasibility of implementing these strategies, however, is not carefully considered. And those interested in reducing firearm injuries through behavioral strategies or improvements in treatment should look elsewhere.

Preventing firearm deaths and injuries is a tremendously contentious subject, at least in the US. While other countries, such as Great Britain and Australia, have recently sought to address their own firearm injury problem by banning certain firearms, this is not currently feasible in the US. *Reducing Firearm Injury*

and *Death* persuasively demonstrates that interventions targeted at the gun itself, even without eliminating guns altogether, also merit our attention. Opponents of such efforts often argue that injury control practitioners do not even understand the product they seek to regulate. Readers of this book can not only "arm" themselves with the information to rebut this assertion, but will be better equipped to craft new approaches.

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How to Read a Paper: The Basics of Evidence Based Medicine. By Trisha Greenhalgh. (Pp 184; £14.95 paperback.) BMJ Publishing Group, 1997. ISBN 0-7279-1139-2.

It may appear odd for an editor to review a book with this title. But after reading it I was convinced it was appropriate for me to do so and I have even resolved to review in a later issue a companion text, *How to Write a Paper*. One justification for urging you to read this book is that knowing what others look for when reading a paper should have a strong influence on what you do, if and when you decide to write a paper. And we, like all other journals, are in a constant quest for more and better papers.

I confess that the subtitle "The basics of evidence based medicine" almost put me off. I'm one of those who, as David Weatherall describes in the foreword, is "slightly hurt by the concept". I bristle at the phrase because it suggests that those of us who work in areas not dominated by randomized trials are "frivolous". But the author, Trisha Greenhalgh assures me that much of the hype about "evidence based medicine" (EBM) is packaging. Indeed, if the basic skills involved in EBM boil down to "assessing the scientific validity and practical relevance of papers articles found in the medical literature", then I have no quarrel. This is what I trust our reviewers do, what our authors try to do, and what our readers should do.

Having said that, we can always use help, and this book is abundantly helpful. Although its core is a synthesis of elements found in most introductory epidemiological or biostatistical texts, it is more than the sum of its parts. It is impossible to imagine even the most sophisticated scientist not benefiting from a thorough read.

I was especially impressed with the chapter entitled "Getting your bearings (what is this paper about?)". This includes a box entitled "Common reasons why papers are rejected for publication" that is so on-target that I urge authors preparing papers for *Injury Prevention* (or any other journal) to place a photocopy of this box over their desk and read it daily. The rest of this chapter reviews basic research designs, explains them clearly, creates a "hierarchy of evidence". Chapter 4 moves on to the heart of the matter, "Assessing methodologic quality". This includes a sensible discussion of critically important questions about the most revealing element of any paper—its Methods section. The chapter entitled "Statistics for the non-statistician" is neatly balanced: not too little that it might do a disservice to the value of well chosen, well executed statistical tests, and not too much, such that it could add to the fear of readers who consider themselves

innumerate (as, incredibly, Greenhalgh herself professes to be!).

Several of the chapters that follow are variations on these themes. The chapter on drug trials includes another of the author's tongue-in-cheek boxes; one listing "Ten tips for the pharmaceutical industry on how to present their products in the best light". Apart from this bit of amusement, however, this chapter offers little more that is relevant for most readers of *Injury Prevention*. The same applies, in part, to the chapter on diagnostic or screening tests. The concluding chapters, on guidelines, economic analysis, and qualitative research, are perhaps of secondary interest for those involved in injury prevention, but it is worth noting that we have published one paper on the basics of economic analysis and another that uses a qualitative approach.

But from this point to the end, things pick up again, at least in terms of issues of interest for readers of this journal. The chapter on systematic reviews and meta-analysis almost convinced me that this new wave, which we are bound to encounter more often in the future, is of value. The author is right: meta-analysis is a term that exemplifies the "fear and loathing" many of us feel towards "evidence based medicine". But I concluded my reading of this chapter much the wiser and, I meekly admit, with less loathing.

It would be unfortunate if scientific readers ignored this book believing they know it all (I didn't; they don't), and sadder still, if non-scientific readers passed up this opportunity to educate themselves painlessly. The appendices are useful and the index is excellent. The price is right and the author writes like an angel.

I have only two fears about endorsing this book so wholeheartedly. First, that I will have nothing original left to say when I finally get to review *How to Write a Paper*. Second, that readers who digest its contents and apply their skills to papers we publish will find many flaws. They will and they should. But I have yet to read, write, or publish the perfect paper—one that could satisfy all the "evidence based" criteria. Our authors do the best they can—as do editors—and, all in all, personally I think we all do extremely well.

BARRY PLESS
Editor

CALENDAR

17–20 May 1998. 4th World Conference on Injury Prevention and Control, Amsterdam, The Netherlands. *Further details:* Conference Secretariat, PO Box 1558, 6501 BN Nijmegen, The Netherlands (tel: +31 24 323 44 71, fax: +31 24 360 11 59, e-mail: <http://www.consafe.nl/conference>).

15–16 June 1998. Department of the Environment, Transport and the Regions Road Safety Education Research Conference, York, UK. *Further details:* Conference Unit, RoSPA, Edgbaston Park, 353 Bristol Road, Birmingham B5 7ST, UK (tel: +44 121 248 2000, fax: +44 121 248 2001).

11–13 August 1998. 1st International Conference on Children's Health and Environment, Amsterdam, The Netherlands. *Further details:*

The International Society for Child and Adolescent Injury Prevention (ISCAIP)

ISCAIP invites you to attend a one day conference, the 3rd ISCAIP Conference on Childhood Injury following the 4th International Conference on Injury Prevention and Control:

RAI Conference Centre, Amsterdam, The Netherlands

Thursday, 21 May 1998, 9:30 am–5:00 pm

The program will focus attention on childhood injury in Europe, child occupant protection, and making regulation work. In addition, a debate on intentional injury and ISCAIP is scheduled for the final plenary. We are also offering the opportunity for registrants to submit commentaries to be included in the conference discussions.

Attendance fee: £55 ISCAIP members; £75 non-ISCAIP members

If you would like to receive further information and a registration form, please fax or e-mail Angela Seay, ISCAIP Administrator, c/o CAPT, 18–20 Farringdon Lane, London EC1R 3AU, UK (fax: +44 171 608 3674, e-mail: Aseay@compuserve.com).

Conference Secretariat ICCHE '98, c/o VVAA Conference Services, PO Box 8153, 3503 RD Utrecht, The Netherlands (fax: +31 30 247 4647, e-mail: congres@vvaa.nl).

9–11 September 1998. International Crashworthiness Conference, IJCrash '98, Dearborn, Michigan, USA. *Further details:* R Parravani, Woodhead Publishing Ltd, Abington Hall, Abington, Cambridge CB1 6AH (tel: 44 1223 891358, fax: +44 1223 893694, e-mail: woodhead@dial.pipex.com).

16–18 September 1998. 1998 International IRCOBI Conference on the Biomechanics of Impacts, Göteborg, Sweden. *Call for abstracts and further details:* IRCOBI Secretariat, INRETS, 25 avenue François Mitterand, Case 24, 69675 BRON Cedex, France (fax: +33 4 72 14 24 37).

6–13 December 1998. International Course on Prevention and Control of Road Traffic Accidents and Injuries, New Delhi, India. The course is being organised by Indian Institute of Technology, Delhi and INRETS, France. *Further details:* Coordinator, Transportation Research and Injury Prevention Programme, Indian Institute of Technology, New Delhi 110016, India (fax: +91 11 685 8703, e-mail: mahesh@cbme.iitd.ernet.in).

7–11 February 1999. Whiplash-associated disorders, Vancouver BC, Canada. *Call for abstracts and further details:* Physical Medicine Research Foundation, Suite 510–207 West Hastings Street, Vancouver, BC V6B 1H7, Canada (tel: +1 604 684 4148, fax: +1 604 684 6274, e-mail: pmmf@axionet.com).

12–16 April 1999. XVth World Congress on Occupational Safety and Health, São Paulo, Brazil. *Further details:* XV Congresso Mun-

Conference announcement

Action on Injury: Setting the Agenda for Children and Young People

19 November 1998

BMA House, Tavistock Square, London WC1H 9JR, UK

This conference will examine all aspects of unintentional injury to children. It will be of interest to senior staff in the health sector and local government staff who have responsibility for accident and injury prevention, including public health doctors, health promoters, and those working in home and road safety. It will also be of interest to those responsible for developing injury systems and commissioning research.

For further information please contact: Helen Richardson: Child Accident Prevention Trust, 18–20 Farringdon Lane, London EC1R 3AU (tel: +44 171 608 3828, fax: +44 171 608 3674, e-mail: events@capt.demon.co.uk).

dial Sobre Segurança e Saúde no Trabalho, Fundacentro, Rua Capote Valente 710, 05409–002–São Paulo–SP, Brazil.

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