Injury in low income countries

The burden of injuries as a major health problem has been recognised in two reports released recently by the World Health Organisation (WHO) and the World Bank. The *Global Burden of Disease* edited by CJJ Murray and AD Lopez and published jointly by WHO, the World Bank, and Harvard School of Public Health estimates that 10.7% of all deaths in the developed countries were due to injuries in 1990 as compared with 7.6% in the developed countries. The estimates for years of life lost due to injuries by cent of the total are reported to be 16% in established market economies, 20% in China, 11% in India, and 14% in other Asian countries. An ad hoc committee on health research relating to future intervention options established under the auspices of the WHO has published a report *Investing in Health Research and Development*. One of the conclusions of the report is that 'the burden due to injuries could equal that of all other diseases worldwide by 2020. In several developing regions including China, and Latin America and the Caribbean, injuries are expected to exceed communicable diseases'.

The committee recommends that a special programme or initiative for research, training, and capacity building on injuries should be set up to focus on issues in low income countries. National governments of most Asian countries are in the process of initiating any major injury control programmes. It is possible that the publication of these reports and associated changes in policies of international organisations would help researchers and health professionals in Asian countries to put pressure on their respective governments to give more importance to injuries as a health problem. However, it will not be very easy to come up with ready made solutions and countermeasures. Road traffic, work practices, and housing patterns in low income countries are different from their prevalent in high income countries. The situation in many low income countries is much more complex than that in those with a high income because of high income differentials and uses of modern technologies along with traditional ones. For example, London has never experienced the traffic injuries prevalent in Beijing today. Therefore, it is very necessary for professionals in low income countries to do a great deal of original work to come up with countermeasures that are feasible and suit these new conditions. International collaboration to share ideas and experiences would certainly help along with training courses in basic principles of injury control.

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Southern African report

The editorial in a recent issue of the *Lancet* related the United Nations' (UN) renewed efforts to resurrect basic living standards in sub-Saharan Africa. Certainly the current statistics are enough to sadden and shock even the toughest 'aid' worker. No access to clean water for 52% of Africans, 68% without proper sanitation, 50 million children with protein energy malnutrition, maternal mortality rates of 62–1000 per 100,000 live births — the list goes on. More than any 'dark' continent any longer, Africa seems rather to have become invisible to the captains of international industry and other investors who cite political instability, shaky infrastructure, and rampant corruption as reasons for their reticence. The UN System-wide Special Initiative on Africa launched in 1996 will include initiatives to support, among other priorities, education, health, technologies along with 20% of market economies, 21% (boys) to 2.4% (girls) income differentials and those with complex diseases.'

It is welcome to see that the 18th African Health Sciences Congress held in Cape Town in April 1996 was concerned with social determinants of health issues, from dental caries in city children to the control of cattle trypanosomosis. Interest in both intentional and non-intentional injury was well represented in papers and posters. The Healthy Cities project were curiously open ended as far as appropriate safety solutions and implementation were concerned. In discussion, many delegates expressed both a common yearning for a better, representative injury data and desperation at lack of resources to realise safety initiatives. By sheer coincidence, a paper presented in a parallel session and entitled 'Health Information Systems — the Mega-lomancan Options' took a four view of undoubtedly expensive Western-style information systems which have failed to play any meaningful role in Southern Africa. Senior author Arthur Heywood who lectures at the University of Western Cape School of Public Health made a plea for 'more elementary and locally relevant information systems using a participatory process at local and district levels'. Any African injury researcher would do well to study the attempt of a slightly more humbly accumulate representative local data, and avoid the temptation to describe or quantify injury on a national scale.

A draft report from the Safe Packaging Conference held earlier this year in Cape Town includes a list of recommendations aimed at protecting children from hazardous substances locally available. These include lobbying for tighter government legislation on safe packaging, labelling and classification, creation of a national database on accidental poisoning, preservation of existing poison information centres (recent victims of health service rationalisation), and industrial worker participation in regulations. Any reader who would like a full copy of the document is welcome to write to me at the address below.

The University of South Africa Health Psychology Unit, a training course in injury control and violence prevention in March, attracting health workers from Maputo and Zimbabwe as well as South Africa. Delegates had the benefit of being guided by the basic principles by Professor Dinesh Mohan and Dr Geetam Tiwari, both of the Indian Institute of Technology, and who acted as coordinators and primary trainers. Issues highlighted during discussion and consequently identified for long term action included the establishment of a Southern African Injury and Violence Control Network and pilot projects, both of which one of which I shall provide some details in my next report.

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LETTERS TO
THE EDITOR

More Safe Communities programs

Scandinavia have been evaluated:
repeating the results from Falköping

EDITOR — The first Safe Community program we know of so far was developed in Falköping, Sweden in 1978. The ideas behind the program were taken up by communities in countries like Norway, Denmark, France, the UK, Canada, Australia, and New Zealand, among others. Independent studies were developed in countries like Thailand, Indonesia, and later South America.

Much of the success in spreading the safety promotion idea was that the program descriptions are able to report a variety of effects, sometimes related to processes. Lothar Schelp’s academic thesis was based on an injury surveillance that started in 1978. The program showed a 27–28% reduction of injuries in the transport, home, and industrial safety areas in 1981. In the control areas there were no effects!

The idea was picked up in Norway, and the Vaeroy study was not only able to repeat the effects from Falköping, but also to show an extensive long term effect with 58% reduction after eight years. Further programs in Sweden were also evaluated. For example in Lidköping, a study on child injuries showed a 4% reduction in the transport, home, and industrial safety areas from 1983 to 1991.

In 1995, another doctoral thesis was released, this time from the University of Tromsø, Norway. It is based on findings from international journals, focusing on effects of intervention over up to eight years from the Harstad Injury Prevention Study. Burns were reduced by 53%, transport injuries by 27%, fall fractures by 26%, and downhill skiing injuries by 15%. The corresponding injury rates increased in the control area (Trondheim) for traffic and fractures seemed to be unaffected.

In February 1996, during the Third International Conference on Injury Prevention and Control in Melbourne, Australia, the Danes showed their first data from the 5-Community-Project in Denmark (the Copenhagen Traffic Injury Surveillance Unit, National Board of Health, Copenhagen). During 18 months in 1990–92, in the intervention areas home and play injuries among children 0–5 years were reduced by 8%, and bicycle injuries 6–16 years by 54%.

Thus, different Scandinavian countries appear to have achieved astonishing results attacking injury problems at the local com-
munity level. We look forward to more studies from other regions of the world.

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1 Schelp L. Epidemiology as a basis of evaluation of a community health intervention (accident prevention). (In Swedish) (Sotiska.) Solna and Sundbyberg, Sweden: Karolinska Institute, Department of Social Medicine, Kronan Health Centre, 1987.


Random thoughts1 on bicycle helmets

EDITOR: If we get bicycle helmet laws, don’t we then need pedestrian helmet laws? Lots of child pedestrians, many more than child bicyclists, are hurt by cars. One wonders whether we would allow cars to go barefoot. Or is the answer to get drivers not to hit people? (Or kids, if you want to limit it.) Isn’t that what’s needed, hard as it is?

Thanks for thinking about, and taking a position on, a hard subject.

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PEDNET
Threads from the Pedestrian Network (PEDNET)

The lively discussions on PEDNET frequently include safety issues. One recent topic focused on efforts to ‘encourage’ motorists to stop for pedestrians in crosswalks. Much of the discussion about how this could be achieved involved elements of epidemiology, education, law enforcement, and environmental modification. It was evident, however, that concerns about violations of crosswalk rules differ widely. Whereas Injury Prevention readers worry about the injuries resulting from these violations, others worry about dangerous drivers scaring walkers. Reducing exposure is one way to prevent injuries, but it is difficult to imagine discouraging walking as a prevention strategy! Indeed, according to one prevention program that rely on deterrence (for example avoid walking at night).

Sally Flocks (of Walk Atlanta, pedast@ol.com) initiated a PEDNET thread by asking about the use of signs to mark crosswalks. Most participants agreed the current sign used in North America (a figure walking between two lines) fails to convey that the law requires motorists to stop for the pedestrian. Participants proposed other signs that might be better. I reported that one study showed that a sign reading ‘Stop Here for Pedestrians’ reduced conflicts by 80%. Another part of the discussion focused on law enforcement. An exchange of information between advocates and researchers was valuable. A paper by Brit et al showed that traffic law enforcement aimed at increasing motorist compliance with pedestrian traffic laws failed to increase drivers’ willingness to stop for pedestrians. The authors state that altering the design features of the roadway to achieve traffic calming is likely to be more effective. Thus further contributions to this thread focused on crosswalk design and other environmental issues. Here’s where the international perspective of PEDNET and the readers of Injury Prevention can be beneficial. Crosswalk design varies between countries. The US relies mostly on pedestrian markings on the road surface, whereas British crosswalks are more elaborate and often include flashing (Belisha) beacons. Unfortunately, by international standards, both of these countries have higher than expected pedestrian injury rates.

Another thread addressed the role of legal liability. In much of Europe, the motorist is at fault for striking a child, whereas that is not the case in Britain and North America. More information about how legal responsibility for road injuries is determined in countries other than the US and Britain would be helpful. Perhaps an Injury Prevention reader can help.

PEDNET participants also learn of the latest developments in politics. In many cities, transportation policy has become controversial. After the long, hot, and smoggy summer of 1995 in Europe, many people saw a connection between transportation policy accommodating car use and damage to the environment. Some suggested that some of the reasons for the increase in the number of injuries and fatalities in London and Southhampton, but would have assisted in preventing a number of fatal injuries in the British elections.

In the US, pedestrian safety has also become a political issue. The national transportation advocates, Surface Transportation Policy Project (STPP), received press coverage for determining that people are nearly twice (1.6 times) as likely to be killed by a car while walking than by a stranger with a gun. Nevertheless, in all, just 10% of US federal money is spent on pedestrian safety, even though pedestrians account for 14% of motor vehicle related fatalities. In urban areas, the disparity increases. In New York City, pedestrian deaths are 53% of the traffic fatalities, but the city spends only 5% of the available funds on pedestrian safety. Other cities were even less likely to invest in pedestrian safety, and 36 states spent none of their federal safety money on pedestrian safety. Although 10 states spent more than 50% of their federal money on rail safety, 10 states spent less than 1% on railroad crossings. Some states would spend more than 10% of their federal safety money on railroad crossings. The STPP has argued that spending federal safety funds on this transit crossing, one tenth as much as spent on pedestrian safety. The STPP have spent on pedestrian safety projects, such as traffic calming, to receive federal safety funds at least proportionately to the number injured. Wouldn’t that amount of money do wonderful things for pedestrians? Their report Mean Streets; Pedestrian Safety and Reform of the National Transportation Law is available on the world wide web at ewg.org.

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1 Van Houten R, Malenfant L. The influence of sign prompts on traffic policy that is already marked crosswalks on motor vehicle-pedestrian conflicts at crosswalks with flashing amber. Accid Hazard Matrix which, with thanks, is distributed annually by the Injury Prevention Group. 1995; 1:


BOOK REVIEWS


Published in 1996, and initiated by the World Health Organisation (WHO) Injury Prevention Program, the goal of this book was, in the words of the foreword written by Claude Romer, to provide an overview of the current states and trends of injuries in countries throughout the world. This it does and does well. Indeed, it is able to present the health risks and the role of all health professionals in addressing injuries as a public health problem. An, in some ways, the book has succeeded in its third goal—to reach the intended broad target audience—is another matter. The dust cover suggests it would be of interest to health professionals, policy makers, community health workers, and students of medicine, nursing, and public health. We fear too many of these do not even know this book exists.

Injury Control effectively outlines the trends in injury in both the lower income countries and higher income countries, delineating the similarities and differences in the etiology and outcomes of injury in the two world areas. It is grounded in the theoretical framework of the Haddon Matrix and the chapters on ‘Translating Concern into Action’ and ‘Injury Control Interventions’ make it especially useful to program managers. Moreover, numerous tables and pictures make it accessible to the novice and the appendices add to its value.

There are three positive features of this book. First, it is well written, coupling clarity with scientific rigor. Second, it achieves a balance between the problems unique to high and low income countries and those that are shared. Third, it is well illustrated, using clear charts and tables alongside many excellent photographs.

Information pertinent to low income countries is contrasted with that from high income countries. The rationale for doing so is that the profiles in each of these settings is different and thus the respective research efforts should also differ. At the same time, the book makes evident that many problems are multinational, so that ‘pesticides used by South American farmers appear in foods on dinner tables in Europe and North America’, and, conversely, ‘automobiles made in Japan, Korea, and the USA traverse the roads of Thailand and Argentina’.

However, while it addresses the special socioeconomic influences on injury in the low income countries it does not delve deeply into underlying issues such as religion.