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Health policy

Governmental health agencies need to assume leadership in injury prevention

C F Finch, A Hayen

Injury prevention must be recognized as a priority health issue

Although the major burden of injury is borne by the healthcare delivery system, the identification and implementation of solutions is often beyond its direct control. Notwithstanding this, there are clear opportunities for governmental health agencies to assume preventive leadership and to engage other sectors in reducing this public health burden.

Injury has been well recognized by a variety of lead agencies internationally as one of the biggest challenges facing public health today.[1 2] The acute care needs and burden on hospital service delivery far exceed that of all infectious diseases combined. No other health condition has such far reaching ramifications for future poor health, the economy, or national healthcare budgets. Despite this, many governmental health agencies do not assume adequate leadership in injury prevention.

Injury prevention is particularly challenging because, although the major burden is borne by governmental health agencies, the identification and implementation of solutions is often beyond their direct control. For example, getting drivers of vehicles to wear properly designed seatbelts to prevent road injury has largely been achieved by the road sector. It is unfortunate that, on the whole, governmental health agencies today have little to say about the impact of the policy decisions of other sectors on injury rates.

This paper highlights how the magnitude of the injury epidemic will escalate unless leadership is adopted by governmental health agencies. Challenges and opportunities for governmental health agency leadership in reducing the magnitude of this burden are presented.

MAGNITUDE OF THE INJURY BURDEN

In developed countries, injury is the leading cause of death in people aged <45 years. Accordingly, it is the single highest contributor to premature mortality and years of potential life lost of any health condition. Its incidence and burden in developing countries is also increasing. But injury does not only kill young people. On an age specific basis, injury mortality rates can be highest in older people. According to the World Health Organization, by 2020 injury will be the first or second leading cause of years of life lost globally.[3]

There has been a suggestion that increased performance of injury retrieval and management practices has contributed to a reduction in mortality since the 1980s. However, with much of the focus of health service delivery being to prevent death alone, the number of people with permanent disability or impairment following injury is likely to increase as the burden is shifted from mortality to those with long term care needs for permanent disabilities or incapacity (for example, permanent brain or spinal cord damage).

The burden of injury is not only experienced through death and hospitalizations. Indeed, minor injury (non-hospital treated cases) is one of the major causes of general community morbidity—especially when general practitioner and allied health consultations are considered.[4]

PROJECTED INJURY TRENDS

If governmental health agencies do not invest in injury prevention, and the level of attention to injury prevention in other government agencies is maintained at its present low levels, the following trends, based on data from NSW Australia, could be expected.

1. *The rate of injury mortality is likely to stabilize.* There is some evidence that this stabilization has begun in NSW: in 1983–87, the age adjusted death rate was 50/100 000; in 1988–92, it was 46/100 000; in 1993–97, 39/100 000; and in 1998–02, 39/100 000. As the population ages, however, the crude rate of injury deaths will increase.

2. *The rate of injury hospitalizations is likely to increase*. Figure 1 projects the number and age adjusted rate of injury related hospital separations for NSW, Australia for the period 2001–26. The major influence on the number of projected injury hospitalizations will be admissions for falls and associated fractures, which will be strongly affected by population ageing.

What should governmental health agencies be doing?

Actions needed to address the key drivers of injury incidence and to mitigate their likely effects include:

1. *Providing adequate resources and incentives for prevention rather than acute care.* The current focus on acute health services delivery is a major barrier towards injury prevention. For example, providing better treatment of spinal cord injuries does not reduce the number of people who sustain a catastrophic neck injury in the first place.

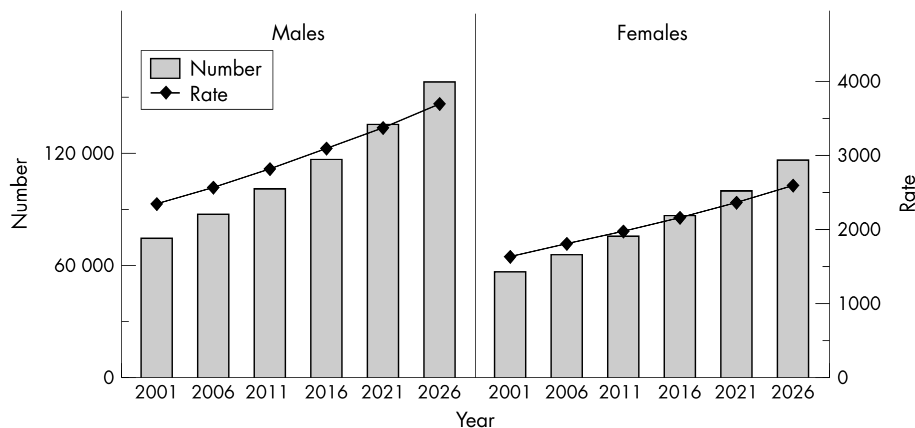

Figure 1 Projected number and age adjusted rate per 100 000 of injury related hospital separations, NSW, Australia 2001–06. Trends in NSW hospital separations from 1989–90 to 2003–04, using the definition of injury hospitalization according to the NSW Department of Health,[5] were applied to population projections to estimate the future number and rate of injury hospitalizations. Over 2001–26, the number of hospitalizations is projected to increase by 96% in males and 90% in females. After adjusting for projected demographic shifts, the rate of hospitalization is likely to increase by about 40%.

2. *Better data and indicators.* Prevention cannot occur without high quality, reliable, relevant, and timely data. Although most routinely collected data are available through governmental health agencies, they need to be translated to other government sectors to inform their responses to the injury problem. Innovative means of collecting information about injury etiology and exposure to risks/hazards need to be developed. Finally, information systems will need to measure the shifting burden from fatalities to lifelong disability and their long term outcomes.

3. *Integration across government and non-government sectors.* The major cost burden of injury is borne by governmental health agencies, yet responsibility for developing and implementing prevention efforts often lie with other government sectors (for example, road speeding controls). The current segregated approaches of different government areas need to be integrated across sectors. There is a need to formulate alternative policies that recognize the complexity of the interrelationships across health and other sectors.

4. *Focus on safe systems design.* As in other health promotion endeavors, efforts focussed solely on achieving behavior change are unlikely to be successful. There needs to be more emphasis placed on safe systems design and safe environments. This will involve engaging both government and private sectors in developing innovative solutions to environmental (physical, social, or political) risks. This may involve introduction of, or changes to, regulation (for example, as in road safety rules relating to speeding and drinking). In others, balancing regulation with community resistance to legislative constraints will need to be considered.

Challenges

There are significant challenges for governmental health agencies in tackling injury prevention and cost reduction. Not least will be how to influence critical thinking and change in other sectors to minimize their own burden. To meet this, governmental health agencies will need to:

1. Recognize injury prevention as a priority health issue and act on this.
2. Demonstrate to other sectors, through the provision of timely and relevant data, that there is a problem to be solved and that it would benefit those other sectors to address it.
3. Make a dedicated investment in information and data systems to inform injury prevention activities. This needs to include sharing and linking of data with, as well as translation of data to, other agencies.
4. Establish strategic, effective partnerships with other government agencies to (a) co-own the injury problem; (b) develop, trial, and implement identified solutions; and (c) widely disseminate and implement these solutions outside of the health sector.
5. Continually monitor the magnitude and costs of the problem and its impact on all aspects of health delivery from primary prevention to disaster management, and acute and rehabilitation service provision.

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