Reducing the burden of injury: An intersectoral preventive approach is needed

Injuries constitute the second largest contributor to the Western Cape burden of disease (BoD), after major infectious diseases caused by HIV/AIDS and tuberculosis and ahead of mental health disorders and cardiovascular and childhood diseases.[1] The Provincial Health Department instituted the BoD Reduction Project to improve health surveillance for planning and resource allocation, review risk factors, and prioritise interventions to reduce the overall BoD.[2]

The dominant causes of injury in the province are violence and road traffic crashes (including those involving vehicles only, and those involving vehicles and other road users such as cyclists and pedestrians). Marked disparities in the nature and frequency of these causes coincide with patterns of social inequity such as income levels, housing, infrastructure, educational levels, employment, and health expenditure. In line with recommendations from the World Health Organization Commission on the Social Determinants of Health (CSDH),[3] the reviews on interpersonal violence and road traffic injury prevention in this issue of *SAMJ*[4,5] emphasise upstream interventions for sectors outside of health. These are more fundamental and frequently more effective in reducing the BoD, as shown by the decline of tuberculosis in developed countries due to improved socio-economic status before the advent of antibiotics.[6] Along with unsafe sex and interpersonal violence,[7] alcohol is a top risk factor, impacting on the 'big five' BoD contributors by causing economic, social and health harms through its intoxicating, dependence-producing, and chronic health effects.[8]

The challenge for provincial governments is to integrate strategies to reduce the BoD by addressing the major upstream determinants of health. Following the Western Cape provincial success in preventing mother-to-child transmission of HIV and antiretroviral programmes (David Bourne – personal communication), preventing injury should be its next top priority. An upstream and intersectoral approach is needed, but as the BoD project is led by the health sector, how easily can other government sectors and stakeholders become involved?

The BoD project is one of some 32 cluster-based multi-departmental cabinet committee work streams typically led by a single provincial government department. Linkages across clusters are difficult to establish, but ostensibly occur at higher levels in sector co-ordinating and top management committees, which report to Cabinet. This bottom-up approach achieves partial success but is insufficient for converting shared prevention goals into co-ordinated preventive actions. Strong support by influential individuals, including ministers, does not guarantee the substantive participation by different sectors required to ensure the success of complex inter-departmental interventions, which then risk remaining silo-based.

This is neither a provincial nor a national anomaly. Many governments have attempted to engage in intersectoral action for health since the 1978 Alma-Ata launch of the concept of intersectoral action and primary health care,[9] and many will heed renewed calls by the CSDH to harness the disease reduction potential of social policies directed towards 'the causes behind the causes'.[3]

Canadian intersectoral model

The Public Health Agency of Canada review[10] identifies successful examples. A particularly relevant example for the Western Cape and South Africa is British Columbia (BC), where the provincial government launched the 'ActNow BC' initiative, which aims to make BC the healthiest jurisdiction in North America by the time they host the Winter Olympic Games in 2010. Their principal BoD risks include alcohol in pregnancy, tobacco, poor diet and lack of exercise. ActNow set modest and attainable goals and timeframes for risk reduction. Their novel structure facilitating intersectoral planning and action for health consists of a special Minister for ActNow BC presiding over a council of Assistant Deputy Ministers representing all departmental sectors. A small executive structure shared between two Departments (Tourism, Sports and Arts, and Health) provides stewardship and co-ordination between stakeholders (including other provincial departments, municipalities, the private sector and NGOs) in achieving its goals. ActNow has its own budget and outsources intervention implementation, monitoring and evaluation. It is therefore a top-down and more complete intersectoral facilitator approach to reducing priority risk factors.

The Western Cape is less developed and less well resourced with a much higher BoD and wider range of risk factors. A more modest version of a BC model aimed at one or two key intersectoral interventions, targeting, for instance, injuries and alcohol as an important cross-cutting risk factor, might be pragmatic.

Targeting alcohol risk

Successful interventions targeting alcohol risk include reducing access to alcohol, modifying the drinking context, drunk-driving counter-measures, and regulating alcohol promotion and advertising.[8] The 2008 Western Cape Liquor Bill, which regulates the trade and therefore availability of alcohol, could be used to implement evidence-based policies to reduce alcohol-related harms, but the absence of a requirement for inter-sectoral accountability in its promulgation limits its scope and efficacy. The Bill aims to bring the numerous illegal shebeens into the mainstream liquor industry by equitable

pg703-705.indd 703 8/22/08 9:41:43 AM

licensing and legislation to permit liquor outlets (taverns) in single-dwelling residential areas. Yet it is unclear about density norms which would limit the proliferation of such taverns. Enacting the Bill is likely to increase access to alcohol by extending hours and days of trade (Sunday sales), and the latest draft seems to lessen the role of the municipalities and communities. It also envisages education of liquor licensees to limit alcohol harm, whereas global evidence indicates that these interventions are ineffective and expensive since they depend on effective liquor and traffic law enforcement. Effective interventions include strategies such as increased pricing, shorter trading hours and reductions in the number of outlets.[8]

A bill drafted by the Economic Development and Tourism Department, and supported by the Environmental Affairs and Development Planning Department (both in the **economic** cluster) may therefore actively increase a major underlying risk factor for violence, injury and other negative outcomes that departments in the **social** cluster must address – notably Health, Social Development and Safety and Security. Although concerns raised in public hearings and by affected departments will be addressed, the lack of coherence between policies that increase access to alcohol and those aimed at decreasing alcohol abuse and alcohol-related harms illustrate the urgent need for more effective and equitable inter-departmental or inter-cluster collaboration.

Targeting violence

The successful violence prevention programme example is from Bogota, Colombia, where, as in the Western Cape, high homicide rates were mainly firearm-related.[4] Key success factors were the programme's institutionalisation within local government, guiding intersectoral principles prioritising social development and cohesion, political empowerment, and investment in public infrastructure. Partnerships between local government and academics were built on an understanding that interventions should be research based and underpinned by reliable injury surveillance.[11] Interventions systematically targeted high-risk times, places and activities (weekends, public carrying of firearms, and unrestricted alcohol sales), and ongoing epidemiological monitoring permitted continuous assessment and programme improvement. Owing to its success, similar programmes were rolled out in five other Colombian municipalities, with evidence of substantial reductions in homicide.[12] This is applicable to the Western Cape, where significant reductions in violence could be achieved by moving from the criminal justice-driven approach to a multi-sectoral strategy which recognises that violence prevention is a key outcome of economic, social and human development policies.

Road traffic injury prevention

For road traffic injury prevention, equity in planning and resource allocation are particularly important, since those who do not possess motor vehicles bear a disproportionate share of road injury and risk.[5] Intersectoral partnerships are key to realising sustainable upstream interventions targeting infrastructural improvements, which should be prioritised ahead of downstream interventions that target behaviour change in road users. Non-motorised mass transit can also promote health and safety by improving air quality, and increasing walking and cycling. Multiple departments and stakeholders should be involved, especially the Department of Transport and Public Works. Cross-governmental and interagency participation is essential given the existence of multiple national, provincial and municipal stakeholders, including the private sector, NGOs and the research community. To support this strategy, the BoD project has proposed an integrated transport reporting and management information system, with comprehensive information on transport collisions, injuries and fatalities, risk factors and usage patterns and including all modes of transport, to several national, provincial and local government agencies.

Interventions targeting alcohol, violence and traffic-related injury risks are quintessentially intersectoral, and partnership and institutionalisation are key factors for successful action. An appropriate, high-level provincial oversight structure should therefore be established and tasked with planning, implementation, monitoring and evaluation. Growing evidence demonstrates the benefits of such co-operation to society and to each sector.

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pg703-705.indd 704 8/22/08 9:41:45 AM

1. Bourne D, Bradshaw D, Groenewald P, *et al*. Institutionalising a mortality surveillance system in the Western Cape Province to measure the Burden of Disease and the impact of preventive interventions. 2007. Cape Town: University of Cape Town on behalf of the Provincial; Department of Health. http://www.capegateway.gov.za/Text/2007/6/cd_volume_2_mortality_surveillance.pdf (accessed 12 December 2007).
2. Myers JE, Naledi NT. Western Cape Burden of Disease Reduction Project: Overview of the Report. Cape Town: University of Cape Town on behalf of the Provincial Department of Health, 2007. http://www.capegateway.gov.za/Text/2007/10/cd_volume_1_overview_and_executive_summaries180907.pdf (accessed 12 December 2007).
3. Commission on Social Determinants of Health. *Achieving Health Equity: From Root Causes to Fair Outcomes*. Interim statement. Geneva: CSDH/WHO, 2007.
4. Matzopoulos R, Myers JE, Bowman B, Mathews S. Interpersonal violence prevention: Prioritising interventions. *S Afr Med J* 2008; 98: 682-690 (this issue).
5. Matzopoulos R, Myers JE, Jobanputra R. Road traffic injury: Prioritising interventions. *S Afr Med J* 2008; 98: 692-696 (this issue).
6. McKeown T. *The Modern Rise of Population*. New York: Academic Press, 1976.
7. Norman R, Bradshaw D, Schneider M, *et al*. A comparative risk assessment for South Africa in 2000: Towards promoting health and preventing disease. *S Afr Med J* 2007; 97: 637-642.
8. Babor TF, Caetano R, Casswell S, *et al*. *Alcohol: No Ordinary Commodity – Research and Public Policy*. Oxford and London: Oxford University Press, 2003.
9. Declaration of Alma-Ata: international conference on primary health care, Alma-Ata, USSR, 6 - 12 September 1978. http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf (accessed 7 August 2008).
10. Public Health Agency of Canada. *Crossing Sectors: Experiences in Intersectoral Action, Public Policy and Health*. Ottawa: Public Health Agency of Canada, Ottawa, 2007.
11. Guerrero R. Violence prevention through multi-sectoral partnerships: the cases of Cali and Bogotá, Colombia. *African Safety Promotion: A Journal of Injury and Violence Prevention* 2006; 4(2): 88-98.
12. Gutierrez-Martinez MI, Del Villin RE, Fandiño A, Oliver RL. The evaluation of a surveillance system for violent and non-intentional injury mortality in Colombian cities. *International Journal of Injury Control and Safety Promotion* 2007; 14(2): 77-84.

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