## Public health science and the global strategy on alcohol

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Science plays an increasingly important role in the development of international health policy and this has certainly been true in the case of a global response to alcohol-related problems. In May 2010, the World Health Assembly adopted resolution EB126.R11, Global strategy to reduce the harmful use of alcohol, based in part on an impressive amount of evidence on both alcohol's contribution to the global burden of disease and the policies capable of ameliorating the harm it causes.<sup>2</sup> Now that the strategy has been adopted, it is time for public health science to take on two new challenges. The first is to expand the evidence base so that it applies not just to the developed countries where most of the world's alcohol consumption is concentrated, but also to the low- and middle-income countries where alcohol consumption is increasing and where the policy response is still weak. The second challenge is to use scientific research to guide the adoption of effective alcohol policies at the national and international levels.

Regarding the evidence base for effective alcohol policy, there is good scientific support for the interventions highlighted in the global strategy<sup>2-5</sup>: increasing capacity of health and social welfare systems to deliver treatment and early intervention; drink-driving countermeasures; limits on the availability of alcohol; restrictions on alcohol marketing; taxation and pricing policies to discourage frequent and heavy alcohol consumption; measures to control social contexts that promote excessive drinking; and reducing the public health impact of illicit and informally produced alcohol. Many of these interventions are universal measures that restrict the affordability, availability and accessibility of alcohol. Given their broad reach, the expected impact of these measures on public health is relatively high, especially when the informal market and illegal alcohol production can be controlled. When universal measures are combined with interventions targeted at high-risk populations, such as adolescents (age restrictions), automobile operators (drink-driving), alcoholics (treatment and support) and hazardous drinkers (brief interventions in primary health care), the combined effect is likely to be substantial.<sup>3,6</sup>

Despite the considerable amount of cross-national research in support of these policy options, policy-makers in many countries, particularly in developing countries, are sceptical about the extent to which the scientific evidence derived primarily from high-income countries applies to their populations and drinking cultures.7 Thus further research will be needed to replicate the science base in a variety of different countries, even as "the precautionary principle" dictates that action on many fronts is warranted now8 to deal with the introduction of new alcohol products (e.g. high alcohol content malt beverages), removal of restrictions on hours of sale, and the promotion of alcohol to young persons.

In addition to continued research on the effectiveness of alcohol control policies, research is also needed to determine how best to implement strategies that differ markedly in cost, cultural acceptability, political challenges and population reach. Here we can learn from implementation research, dissemination theory and case studies. For example, evaluation studies of alcohol screening and brief intervention programmes in Brazil, Nordic countries,9 Spain and the United States of America have established the conditions under which a public health approach to early intervention for hazardous drinking is feasible in primary care and other healthcare settings. Optimal conditions include organizational leadership and logistical support for early intervention programmes.

A final area of research that cannot be neglected is systematic investigation of the alcohol industry itself as a vector for alcohol-related disease and disability.<sup>3,10</sup> Aggressive marketing of alcoholic beverages in low-consumption developing countries needs to be monitored, as does industry compliance with its own codes for responsible advertising. More stringent measures to protect young people from exposure to irresponsible advertising need to be considered as self-regulation codes are easily circumvented and not enforceable.

As described in the global strategy document, <sup>1</sup> what is needed now is a heightened awareness of the global extent of the alcohol problem and the political commitment to implement evidence-informed alcohol con-

trol strategies. The global strategy provides a major opportunity for each country to re-evaluate its alcohol control policies in light of current evidence. Policy changes should be made with caution and with a sense of experimentation to determine whether they have their intended results. At the same time, countries should strengthen the links between science and policy so that promising research findings are identified, synthesized and effectively communicated to policy-makers and the public.

## References

- Global strategy to reduce the harmful use of alcohol. Geneva: World Health Organization; 2010 (EB126/2010/REC/2).
- WHO Expert Committee on Problems Related to Alcohol Consumption. 2nd report (WHO Technical Report Series 944). Geneva: World Health Organization; 2007. Available from: http://www.who.int/substance\_abuse/expert\_ committee\_alcohol\_trs944.pdf [accessed 3 August 2010].
- Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, et al. Alcohol: no ordinary commodity – research and public policy. Oxford: Oxford University Press; 2010.
- Room R, Babor TF, Rehm J. Alcohol and public health. *Lancet* 2005;365:519–30. PMID:15705462
- Anderson P, Chisholm D, Fuhr DC. Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. *Lancet* 2009;373:2234–46. doi:10.1016/S0140-6736(09)60744-3 PMID:19560605
- Brand DA, Saisana M, Rynn LA, Pennoni F, Lowenfels AB. Comparative analysis of alcohol control policies in 30 countries. *PLoS Med* 2007;4:e151. doi:10.1371/journal. pmed.0040151 PMID:17455992
- Room R, Jernigan D, Carlini-Cotrim B, Gureje O, Mäkelä K, Marshall M, et al. Alcohol in developing societies: a public health approach. Helsinki: Finnish Foundation for Alcohol Studies; 2002.
- Kriebel D, Tickner J. Reenergizing public health through precaution. Am J Public Health 2001;91:1351–5. doi:10.2105/ AJPH.91.9.1351 PMID:11527753
- Babor TF. Taking stock: twenty-five years of translational research on alcohol screening and brief intervention. *Nordic Studies on Alcohol and Drugs* 2008;6:578–80.
- Anderson P, de Bruijn A, Angus K, Gordon R, Hastings G. Impact of alcohol advertising and media exposure on adolescent alcohol use: a systematic review of longitudinal studies. *Alcohol Alcohol* 2009;44:229–43. PMID:19144976

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