

# Public health interventions symposium 2006

J Price

Senior Lecturer, Public Health Sciences, University of Edinburgh, Edinburgh, Scotland

**ABSTRACT** This showcase symposium, co-ordinated by the heads of academic public health departments in Scotland, addressed the evidence of effectiveness for interventions in areas of major public health importance. Topics ranged from how best to gather the evidence, where there is (and is not) already a body of evidence, and how available evidence influences national policy.

**KEYWORDS** Evidence, interventions, national policy, public health

**LIST OF ABBREVIATIONS** (MRC) Medical Research Council, (NICE) National Institute for Health and Clinical Excellence, (RCT) randomised controlled trial

**DECLARATION OF INTERESTS** No conflict of interests declared.

*Published online 21 June 2006*

*Correspondence to J Price, Public Health Sciences Section, Division of Community Health Sciences, University of Edinburgh, Medical School, Teviot Place, Edinburgh, EH8 9AG*

*tel. +44(0)131 650 3240*

*fax. +44 (0)131 650 6909*

*e-mail j.price@ed.ac.uk*

As a recent recruit to the field of public health, I remember attending a tutorial in 1995 where it was emphasised that public health interventions were complex and difficult to evaluate. I was concerned by the implicit assumption that, because of these constraints, it was not always necessary or indeed desirable to evaluate the effectiveness of such interventions. One argument was that if we wait for evidence of effectiveness, we wouldn't ever do any of the things which seem so 'obvious' in terms of improving public health, such as reducing smoking levels by mass media campaigns. The conference held at the Royal College of Physicians of Edinburgh on 23 and 24 February 2006, served very ably to dispel any lingering doubts I may have had about the commitment of the entire public health fraternity to collect and utilise the very best evidence of effectiveness for even the most complex public health interventions.

On a typically 'dreich' Thursday morning in central Edinburgh, Dr S Sridharan (Senior Research Fellow, University of Edinburgh), Professor M Kelly (Director of the Centre for Public Health Excellence, NICE) and Professor M Drummond (Director of the Centre for Health Economics, University of York) gave a rounded account of many of the methodological issues which present a challenge to the evaluation of complex public health interventions. Issues which were emphasised included the importance of an evidence-based approach to evaluation, how evaluations work best if they combine multiple different methodologies (both qualitative and quantitative) and the difficulty of incorporating the wider costs to the community when undertaking economic evaluations.

In the second session, the considerable amount of work that is ongoing to synthesise evidence on effectiveness of interventions aimed at reducing alcohol-related problems,

and the relationship between the evidence and national policies on alcohol, were reviewed. Professor N Heather (Division of Psychology, Northumbria University) advocated the use of the 'Rose' concept, reducing the amount of alcohol consumed across the entire general population as well as brief interventions (for example in general practice) for hazardous, harmful or dependent drinkers. Professor I Crombie (Head of Public Health Section, University of Dundee) demonstrated very neatly how evidence does seem to be shaping policy internationally, but that there can be little correspondence between citing of evidence on interventions and either interventions proposed or actual commitment to change.

In the pre-lunch session, there was the rather disheartening suggestion that despite considerable evidence on interventions to reduce harm from alcohol, this evidence is not always being implemented. However, the 'feel-good' factor returned after lunch with presentations on major public health achievements in the field of smoking cessation. Professor L Clancy joined the conference by video-link (with no technical hitches!) and related, to a rapt audience, how collaboration between multiple agencies and ministers in Ireland led to the successful implementation of the Irish workplace smoking ban. This was followed by a review of studies showing the effectiveness of NHS stop-smoking services, another public health success ably described by Dr L Bauld (Department of Urban Studies, University of Glasgow).

Following a detailed address from the Deputy Minister for Health and Community Care, Mr L Macdonald, on the current and future evidence base, policy-making and issues of equity, the conference delved into the arena of obesity. In an overview of systematic reviews on the impact of interventions in children, adolescents and young adults, Professor C Smith (Department of Public

Health, University of Aberdeen) noted the generally poor quality of research in this field, the potential promise of multi-component interventions, and the need for new approaches to develop and evaluate public health policies to prevent obesity. Professor J Seidell (Department of Nutrition and Health, Free University of Amsterdam) emphasised the importance of targeting adults (and not just children) for interventions aimed at reducing obesity. Professor G Hastings (Institute for Social Marketing, University of Stirling) returned to the issue of smoking to describe the International Tobacco Control Policy telephone survey as a model for evaluating public health research. He neatly finished with a theme from the start of the day's proceedings, namely that a variety of different and flexible approaches are required to evaluate complex interventions.

In day two of the conference, Dr D Ogilvie (Medical Research Council, Social and Public Health Sciences Unit, Glasgow) reviewed evidence for the effects of interventions to address inactivity, ranging from those targeted at the individual, to community-wide campaigns and environmental policy. Certain interventions have been shown to be effective, but a recent evidence-based recommendation that all children should be undertaking two hours per week physical activity in school is being woefully underachieved. Many interventions have been shown to be effective only in the short term or with limited effect size. Professor R Bhopal (Public Health Sciences, University of Edinburgh) and Dr R Gardee (Director, National Resource Centre for Ethnic Minority Health) brought to our attention the disappointing minority of RCTs and other evaluations which consider race, making a plea for inclusion of ethnic minorities in such studies, even if it may take some time to collect adequate individuals to enable meaningful meta-analyses.

At a public health policy level, many policies to ensure equity for ethnic minority populations are in place, but practice at Board level can be lacking and requires further commitment.

Evaluation of health policy was addressed by both Dr E Wimbush (Health Scotland) and Ms S Haw (NHS Scotland) using the Scottish Diet Action Plan and Smoking in Public Places Policy respectively as examples. Both described the complex modelling required to evaluate public health interventions at a policy level, and the audience were left in no doubt about the comprehensive nature of the evaluation planned for the Scottish smoking ban coming into effect in March 2006. Professor P West and Dr P Craig then reviewed the lessons learned from the four public health demonstration projects, noting that although health impact results had been disappointing, much had been learned about commissioning evaluations.

The symposium ended with a lively panel discussion, chaired by Dr A Fraser. Expert opinions were offered on a wide range of issues by the panel, comprising Dr H Burns (Chief Medical Officer), Mrs P Whittle (Director of Health Improvement at the Scottish Executive), Professor S MacIntyre (Director of the MRC Social and Public Health Sciences Unit, Glasgow), Professor S Platt (Director of the Research Unit in Health and Behavioural Change, University of Edinburgh), Dr L Gruer (Director of Public Health Sciences, NHS Health Scotland, Glasgow) and Mr G Robertson (Chief Executive, NHS Health Scotland, Edinburgh). This proved a fitting conclusion to a well attended and organised, thought-provoking and highly successful symposium.