



Drug resistant TB needs rapid action

The re-emergence of tuberculosis as a global health problem over the past 20 years prompted researchers from the Public Health Laboratory Service (UK) to use data from Mycobnet (UK Mycobacterial Resistance Network) to identify levels of drug resistance to the disease in the UK between 1993 and 1999.

They found that, although the proportion of drug resistant cases seems to be stable in the UK at present, more than 1 in 20 patients has resistance at diagnosis. Furthermore, more than 1 in 100 patients has multidrug resistant disease. Certain groups of people were found to be at a higher risk of developing drug resistant tuberculosis, including younger men, residents of London, foreign born subjects, and HIV infected people.

The authors conclude by recommending that tuberculosis controls should be strengthened to minimise the emergence of resistance, through practical measures such as rapid diagnosis, rapid identification, supervised treatment, and comprehensive surveillance. (*Thorax* 2002;**57**:477–82).

Mixed media fails to move masses

A mass media campaign in Denmark aimed at convincing more young adults to take tests for *Chlamydia trachomatis* failed, achieving a response rate of just 0.6% (*Sexually Transmitted Infections* 2001;**77**:416–18). The infection, which is widespread globally and has a low detection rate because of largely asymptomatic features, can cause female infertility and ectopic pregnancy if left untreated.

The campaign consisted of six different media (ranging from radio advertising to bicycle errand boys) that all explained the infection, detailed its potential consequences, and gave instructions on how to order a

home test package. The self obtained samples were then mailed directly to the laboratory for analysis.

The target population of 30 000 21–23 year olds that live in Aarhus County requested 342 test packages in total and returned 184 of them. The prevalence of infection was 7.8% and 8.4% in men and women respectively, of which 60% of men and 40% of women had asymptomatic infection. In this instance the use of mass media to recruit young adults to be tested for *Chlamydia trachomatis* failed. However, requests for home test kits doubled when radio advertising was in use, suggesting that it may be possible to use mass media as part of a concerted outreach campaign after all.

Science versus smokescreens

Public health advocates should turn to science more often to reinforce their arguments. In a study on the development of workplace smoking regulations, researchers found that the protobacco lobby were more likely to use scientific arguments than those opposed to workplace smoking. The arguments used by those in favour of a workplace smoking ban in two American states were mainly restricted to political, economic, procedural, and ideological issues despite the strong evidence base regarding passive smoking and negative health effects. On the few occasions that they did invoke science they were met with criticism from those against the workplace smoking ban, who tended to fragment the evidence into acontextualised single studies and undermine them individually.

The authors recommend a more organised approach to supporting legislation that affects public health, including recruiting credible scientists to help explain the strength of the evidence and to counter criticisms from detractors. (*Tobacco Control* 2001;**10**:329–36).

Americans fear Americans with guns

In contrast with what the NRA argue, the American public believes that

increased gun carrying by others reduces rather than increases their safety. (*Injury Prevention* 2001;**7**:282–5). Twenty eight states have significantly relaxed restrictions on concealed gun carrying in the past 16 years, with the pro-gun lobby spending \$3.8 million on a (failed) campaign in one state alone in 1999. Researchers used data from two national random telephone surveys conducted in 1996 and 1999 (achieving a total sample of 4426) and found that most (59%) said that they would feel less safe if there was an increase of firearms in their area. The groups significantly more likely than others to believe that they would feel less safe were non-whites, urban dwellers, those with children in their household and people who do not own guns. Somewhat unsurprisingly, the only group who said that they would feel more secure were those who had carried a firearm on their person in the previous month. The authors subsequently feel that existing legislation in many states may not adequately consider the feelings of the population and, as a result, that legislation should be re-evaluated.

Sex, models, and mathematics

Sex and mathematics are an unorthodox combination but a recent paper brings the two together to demonstrate how mathematical models can be used to facilitate epidemiology and control. The article is intended for use by non-mathematicians and details terminology, models, and policy and also gives instruction on how to construct a simple model. While recognising that the language of mathematics can be intimidating for those unused to it, the author points out that ignorance in this area can lead to interesting work being ignored or, more significantly, uncritical acceptance of results. He concludes by stating that “modelling should be an iterative process, with a dialogue between theoreticians, experimentalists, field workers and policymakers”. (*Sexually Transmitted Infections* 2002;**78**:7–12).

M Muir
BMJ Journals; mmuir@bmjgroup.com