guidelines¹⁶ into general practices.¹⁷ Boxes 1 and 2 summarise the basics for a non-specialist GP or practice nurse. In addition, practices need good working relations with GUM clinics. Local care pathways should be developed in collaboration with primary care trusts. This should ensure that, when appropriate, patients diagnosed with chlamydial infection in primary care can be referred directly to a genitourinary clinic nurse for partner notification and a full STI screen without a long wait either for an appointment or in the clinic. Although GPs, GUM and family planning clinics are doing their best, current funding for sexual health in the UK remains 'manifestly insufficient'.¹ 'No one should underestimate the challenge of introducing a chlamydia screening programme into primary care'.¹²

PIPPA OAKESHOTT Senior Lecturer in General Practice Community Health Sciences, St George's Hospital Medical School, London

PHILLIP HAY
Consultant and Honorary Senior Lecturer in Genitourinary
Medicine

Mark Pakianathan Consultant in Genitourinary Medicine, The Courtyard Clinic, St George's Hospital NHS Trust, London

References

- Adler MW. Sexual health health of the nation. Sex Transm Infect 2003: 79: 85-87.
- McNulty C, Freeman E, Bowen J, et al. Barriers to opportunistic chlamydia testing in primary care. Br J Gen Pract 2004; 54: 508-514.
 Jeal N, Salisbury C. Self-reported experiences of health services
- Jeal N, Salisbury C. Self-reported experiences of health services among female street-based prostitutes: a cross sectional survey. Br J Gen Pract 2004; 54: 515-519.
- 4. House of Commons Select Committee. Third report of session

- 2002–2003. Sexual Health. London: The Stationery Office, 2003. http://www.parliament.the-stationery-office.co.uk/pa/cm200203/cmselect/cmhealth/69/6903.htm (accessed 8 Jun 2004).
- 5. Adler M. Sexual health. BMJ 2003; 327: 62-63
- Department of Health. The national strategy for sexual health and HIV. London: Department of Health, 2001.
- Scholes D, Stergachis A, Heidrich F, et al. Prevention of pelvic inflammatory disease by screening for cervical chlamydia infection. N Engl J Med 1996; 334: 1362-1366.
 Marra CA, Patrick DM, Reynolds R, Marra F. Chlamydia
- 8. Marra CA, Patrick DM, Reynolds R, Marra F. *Chlamydia trachomatis* in adolescents and adults. Clinical and economic implications. *Pharmacoeconomics* 1998; **2**: 191-222.
- Oakeshott P, Hay P, Hay S, et al. Detection of Chlamydia trachomatis infection in early pregnancy using self-administered vaginal swabs and first pass urines: a cross-sectional communitybased survey. Br J Gen Pract 2002; 52: 830-832.
- 10. Graham A. Sexual health. Br J Gen Pract 2004; 54: 382-387.
- Pimenta J, Catchpole M, Rogers P, et al. Opportunistic screening for genital chlamydial infection. Prevalence among healthcare attenders, outcome, and evaluation of positive cases. Sex Transm Infect 2002; 79: 22-27.
- Catchpole M, Robinson A, Temple A. Chlamydia screening in the United Kingdom. Sex Transm Infect 2003; 79: 3-4.
 Fenton KA, Korovessis C, Johnson A, et al. Sexual behaviour in
- Fenton KA, Korovessis C, Johnson A, et al. Sexual behaviour in Britain: reported sexually transmitted infections and prevalent genital Chlamydia trachomatis infection. Lancet 2001; 358: 1851-1854.
- McCarthy GA, Pakianathan. Patterns of chlamydia testing by general practitioners in southwest London in abscence of guidelines or a screening programme [abstract]. Int J STD AIDS 2004: 15(suppl 1): 16.
- 2004; 15(suppl 1): 16.
 15. Oakeshott P, Kerry S, Hay S, Hay P. Opportunistic screening for chlamydial infection at time of cervical smear testing in general practice: prevalence study. *BMJ* 1998; 316: 351-352.
- Oakeshott P, Hay P. 10-minute consultation. Cervical Chlamydia trachomatis infection. BMJ 2003; 327: 910.
- Oakeshott P, Kerry S. Development of clinical guidelines. Lancet 1999; 353: 412.

Acknowledgement

We thank The BUPA Foundation for funding.

Address for correspondence

Pippa Oakeshott, Senior Lecturer in General Practice, Community Health Sciences, St George's Hospital Medical School, London SW17 0RE. E-mail: oakeshot@sghms.ac.uk

Engaging with the public?

THE recent controversy surrounding the use of the measles, mumps and rubella (MMR) vaccine highlights a series of issues facing society at large. These issues have had a dramatic impact on general practitioners in particular. The issues include public trust in the advice provided by the government; the public's perceptions of the medical profession and of the advice that it provides; the lack of research into how people take into account potential and actual risks when making important decisions; how scientific findings are presented to the public by professionals and through the media; and the views of the public held by policy makers, scientists and health practitioners.

It is easy to understand the frustration felt by many in the medical and health professions at the behaviour of the public in general. The waste of resources caused by smoking, alcohol and other drug abuse, and inappropriate dietary habits in the face of overwhelming evidence is a constant drain on morale and budgets. There are innumerable instances of people ignoring what is widely known and well understood about health and wellbeing.

However, the MMR issue highlights other concerns that deserve to be addressed by policy makers, researchers and practitioners. In the case of MMR, many experts appear to be arguing that 'if only the public knew the facts then they would act differently'. This deficit model of the public is a common feature identified by research into professionals' views of the public.

In the latter half of the 20th century, there emerged a concept that became known as the 'public understanding of science'. In effect, this was a polite way of referring to the public's lack of understanding of what experts thought they should know. With the same degree of subtlety associated with talking loudly to foreigners, the antidote to public misunderstanding was assumed to be 'more understanding', whether the issue was nuclear power, genetic engineering or emissions from electricity pylons.

If the solution was 'more understanding', what was the problem? In many cases, public ignorance was attributed to an inadequate science education, untrained and ignorant journalists, the difficulty of the issues involved and the lack

Editorials

of an effective strategy for informing the public about what they should know and believe. Cue much head shaking and hand wringing

A swathe of initiatives were brought to bear on the 'problems'. These included a national curriculum that ensured that boys could not drop out of biology and that all girls studied physics to the age of 16, at least; a Committee for the Public Understanding of Science (COPUS); courses in science communication; and an increase in media-savvy scientists. Many personal and professional risks were taken by scientists and health professionals who committed themselves to the task of raising public understanding while at times suffering cynicism and jealousy at the hands of their peers.

But the public seemed largely unmoved. In retrospect, a lot of well-meaning people had not only identified the wrong solutions, they had not spotted the real problems. As the articles in this edition of BJGP indicate, 1,2 the issues are more complex, more subtle and more challenging than was thought even a decade ago.

A major step in the field was a recognition that there is no such thing as 'the public'. It is not that there isn't such a thing as the public, it is that there are many publics. What advertising and media professionals have known for some time, came as a surprise for some of those engaged in promoting science and engineering. Understanding the public's point of view became both more difficult and yet more achievable once it was acknowledged that a range of different experiences, understandings and values were held by sections of 'the public'.

Another conceptual leap involved a recognition that people made decisions based on more than their knowledge of the science involved. People base their choices on a range of factors including their direct experience of phenomena — 'My grandad smoked 20 fags a day and he lived till he was 90'; their perceptions of the integrity of the source of information — government scientists tend to be trusted less than university scientists; how 'in control' they feel of the risk at stake; underlying ethical beliefs; and, of course, factors such as age, sex and nationality.

In the case of MMR, these factors played a major role in public decision making, to an extent that could potentially have led to a crisis of epidemic proportions. Thankfully, the issue seems to be heading for resolution. In the case of genetically modified (GM) organisms, however, the situation is perhaps different.

So, what lessons can we learn from recent events? The evidence from the recent 'GM Nation?' public debate is that we don't learn from experience. In November 1994, the Biotechnology and Biological Services Research Council provided funding to the Science Museum to organise a national consensus conference on plant biotechnology. The lay panel's report of the conference was subsequently published and widely distributed.3 Many of the recommendations seemed sensible and worthy of attention. They included the following: that GM foods should be labelled so people have choice, and labelling procedures should be agreed internationally; that developing countries should help to shape the agenda so the technology really could help them; and that patenting approaches needed a more sensible framework. Many years later, the findings of GM Nation? are very similar,4 but now the language used is more extreme and the views more polarised. Policy makers, industrialists and scientists did not listen to the public, or, if they did, they did not change their stance, their policies or their strategies.

The lessons we might usefully learn are to take the public's concerns seriously, tackle issues before the media starts to campaign, and that engaging with the public in deliberative consultations, like the 1994 consensus conference, is worthwhile if policy makers are prepared to take on board the public's views in transparent ways. In proper deliberation (and I would argue that GM nation? wasn't an example of this) people who have no vested interests in the issue are selected and given time (weeks or months) to consider a range of viewpoints, including those of scientists, and time to think and discuss issues with friends and family. They ideally tackle big questions like 'how do we make best use of plant biotechnology?', rather than small questions like 'should we commercialise GM crops?'.

I would argue that the inability of scientists and policy makers to consult with the public effectively is the key to the problems that we continue to encounter. What we know is that the public wants to be listened to, they are able to engage with complex issues if they are given the opportunity, they can change their minds given time and an opportunity to hear different points of view, and, that their opinions of what they hear depends on the trustworthiness of who is talking. And that if given a proper chance to tackle issues, their advice is worth considering very seriously.

There is no doubt that ordinary people want to know more about their illnesses, their food and their drugs. Too often they have been treated as ignorant, confused or easily swayed by those they trusted with their lives, their votes and their money. As a result they have lost faith in science, lost trust in the medical profession and despaired of politicians.

Professionals and policy makers need to show that they can respond to public concerns seriously and sympathetically. If they do, there is a chance that bridges can be built across the chasm of mistrust that exists. If they do not, we are condemned to repeat the errors of those that went before us. Public engagement of the highest quality is the way forward.

KATHY SYKES

Collier Professor of the Public Understanding of Science and Technology, Institute of Advanced Sciences, University of Bristol, Bristol

References

- McMurray R, Cheater FM, Weighall A, et al. Managing controversy through consultation: a qualitative study of communication and trust around MMR vaccination decisions. Br J Gen Pract 2004; 54:
- 2. Flynn M, Ogden J. Predicting uptake of MMR vaccination: a
- prospective questionnaire study. *Br J Gen Pract* 2004; **54**: 526-530. UK national consensus conference on plant technology 1994. Final report of the lay panel. 2-4 November, 1994, London. http://www.ncbe.reading.ac.uk/NCBE/GMFOOD/conference.html (accessed 10 Jun 2004)
- GM Nation? The public debate. http://www.gmnation. org.uk/ (accessed 10 Jun 2004).

Address for correspondence

Kathy Sykes, Collier Professor of Public Engagement of Science and Engineering, Institute for Advanced Studies, University of Bristol, Royal Fort House, Clifton, Bristol BS8 1UJ. E-mail: Kathy.Sykes@bristol.ac.uk