UK takes pride in 'principled pragmatism'

Early last year, the British government announced that it had decided not to follow the advice of a committee of the House of Commons to set up a panel to monitor the social impact of human genetics research, arguing that this would create unnecessary bureaucracy (see *Nature* **379**, 195; 1996).

But within two months the government had changed its mind, announcing plans to create a Human Genetics Advisory Commission which would take a "broad perspective on the implications of genetics".

Members of the committee prided themselves that the government had eventually accepted the logic of their case. A key factor was that senior politicians appear to have been made aware that action was needed to contain public disquiet over the way a number of critical issues raised by genetics had been handled, and to provide reassurance about such issues in future.

The pattern is a traditional one in the United Kingdom. A strong distrust of central authority — contrasting, for example, with the French acceptance of a powerful state — has discouraged an excessively legislative approach to ethical issues. Where action has been taken, it tends to be reactive rather than proactive. That gives flexibility, but opens decisions to political pressures.

Britain's preference for what one ethicist calls "principled pragmatism" has favoured greater reliance on professional codes of conduct and voluntary guidelines with minimal legislative backing, and ad-hoc commissions of inquiry into specific topics — such as the use of fetal tissue or, most recently, commercial genetic screening kits.

But there has also been a growing awareness in recent years of the need for a more institutional approach to the ethical issues raised by developments in the biomedical sciences, backed by a desire to ensure that public concern over these issues does not become too disruptive.

Growing concern

There is plenty of evidence that this concern is growing. It has been spurred not only by individual scientific developments — the most obvious being the cloning of the sheep Dolly at the Roslin Institute in Scotland — but also, some argue, by deeper and less well articulated fears about modern science.

According to Martin Bauer, for example, a sociologist at the London School of Economics, analysis of media coverage of stories on topics such as genetics reveals a significant increase in the emphasis given to the moral rather than safety dimensions of their likely impact. "Risk as such appears to be becoming less relevant," says Bauer, referring as an example to debates over genetically-modified foods. "What people seem to be interested in is whether a particular scientific development is part of the natural order, or whether a moral order is being transgressed."

The strength of this feeling has often taken the government — and the biotechnology industry — by surprise. As elsewhere in Europe, for example, one factor spurring a new political interest in bioethics was the unexpected rejection by the European Parliament two years ago of a bid to harmonize biotechnology patents throughout the European Union (see *Nature* **374**, 103; 1995).

Opposition to the move focused on part of the new rules confirming the legal right to patent human genetic material. Following an active lobbying campaign by the industry, the rules have now been passed in a revised form. But memories of the initial vote, which could if sustained have caused major problems for the industry, remain strong.

Training need

One response to such types of situations in the academic world has been greater awareness of the need to include examination of ethical issues in the training of scientists. "Scientists and engineers must be prepared to live in a society in which a whole panoply of new mechanisms is coming into force," says Ray Spier, currently professor of microbiology at the University of Surrey, who next month takes up the country's first chair in science and engineering ethics.

In research funding organizations, there has also been a new willingness to look seriously at the public response to the research they support. The Medical Research Council last year set up an advisory panel to assess the implications of some of its more controversial projects — such as those on the genetic basis of social behaviour. Similarly the Wellcome Trust, now almost equal in influence to the MRC, is about to announce a major initiative to support work on the ethical and social implications of research ranging from genetics to the neurosciences.

Much recent action on ethics-related issues has been prompted by the Nuffield Council on Bioethics. Set up in 1990 as a focus for debate on issues not already covered by medical bodies such as the Royal College of Physicians, the council has helped mould government thinking on topics from genetic screening to xenotransplantation.

Brian Wynne, professor of science and social policy at the University of Lancaster, argues that the issues raised by bioethicists are often those "secondary risks" which have been marginalized by an excessively reductionist interpretation of risk and safety. "The problem is that there is no language to talk about them in the context of the [conventional] risk debate," he says.

And Ruth Chadwick, who runs the Centre for Professional Ethics at the University of Central Lancashire, says that a broader definition of bioethics is needed, arguing that it has tended to concentrate on the impact of biomedical developments on individuals, to the neglect of its wider social consequences.

The lack of consensus on the role of bioethical arguments in policy debates remains frustrating to some. But others such as Chadwick say that it offers an opportunity to integrate into public policy genuine public concerns about science. Science minister John Battle has offered to boost this process by supporting a 'consensus conference' on genetics through the Human Genetics Advisory Commission.

David Dickson

Policing ethical codes in India proves tough

The ethical dilemmas raised by modern biomedical research are not confined to industrialized countries, and many less developed and industrializing nations are also growing increasingly concerned. India is tightening its ethical guidelines for biomedical research and is setting up a national bioethics advisory panel, although policing such guidelines is likely to remain an uphill task.

In the early 1980s, for example, despite the recent introduction of ethical guidelines for research on human subjects, a trial carried out at one of the institutes of the Indian Council of Medical Research (ICMR) involved withholding treatment from more than 1,000 women to enable researchers to find out if lesions in their uterine cervix turned into cancer.

Eventually more than 70 women developed cancer and two died during radiation therapy. "Our problem is not writing guidelines but their implementation," says Avtar Singh Paintal, former director general of ICMR and founder president of the Society for Scientific Values, whose goal is to promote ethics in research.

A 15-member committee headed by M. N. Venkatachallaiah, a retired chief justice, is currently revising the ethical guidelines covering biomedical research, taking into account issues raised by modern genetics. Various subcommittees are evolving an ethical code for research in epidemiology, genetics and human tissue transplants.

Another committee is being set up by the Department of Biotechnology to draw up guidelines for human trials of recombinant products.

K. S. Jayaraman