US religious groups oppose gene patents

A long running controversy in the United States came to a head when a coalition of more than 80 religious groups held a nationally televised press conference in Washington this month to declare their opposition to gene patents. The coalition includes Methodists, Baptists, Jews, and Muslims under the banner of the Joint Appeal Against Human and Animal Parenting.

The coalition said: "We are opposed to the parenting of human embryos, genes, cells, and the parenting of animals including those with human genes engineered into their permanent genetic code."

In a landmark case in 1980 the US Supreme Court ruled in favour of a microbiologist, Ananda Chakrabarty, who had been denied patent protection for a genetically engineered strain of bacteria capable of breaking down crude oil. The court determined that Chakrabarty's microbes met the three criteria for patentability: they were novel, useful, and not obvious. In 1987 the US commissioner of patents and trademarks announced that henceforth animals would be patentable—but not humans, because the 14th amendment to the constitution forbids the ownership of one person by another.

Last April Harvard University received the world's first patent for an animal, a mouse whose cells have been genetically engineered to carry a gene that promotes cancer. Philip Leder, head of the team of geneticists that won the patent, was quoted as saying, "Here is a strain of mice that have taken the first step towards cancer...with them you can learn some rather powerful and telling lessons about the genesis of cancer in vivo."

Religious leaders maintain that such patents violate divine law. Richard Land of the Southern Baptist Federation said, "For human beings to claim ownership of it [genetic material], to reduce it to the legal equivalent of a mineral right like uranium or gold that can be mined out of the earth, is to us grotesque and horrendous."

Defenders of gene patents, led by the Biotechnology Industry Organisation, argue that opponents of animal biotechnology have used the issue as a way of focusing public attention on matters unrelated to the patent office's mandate, which is written in the constitution as follows: "The Congress...shall have the power to promote the progress of Science and the Useful Arts by securing for limited times to authors and inventors the exclusive rights to their respective writings and discoveries."

United against gene patents

An inability to obtain patent protection would be a serious obstacle to investment in the huge costs of genetic research and development. Without a patent to protect intellectual property there is nothing to prevent a competitor from pirating the technology and undercutting the market.

Yet a common argument offered by critics of patenting of animals is that producing new life forms for profit, like leaner cattle or turkeys with bigger breasts, "strikes many as morally offensive," in the words of the National Council of Churches.

A recent Louis Harris poll, however, found that 68% of the American public and 81% of college graduates believe that it is not morally wrong to genetically engineer plants and animals.

In the continuing debate over gene patents the self styled Joint Appeal Against Human and Animal Parenting, with allies on the religious right, will be opposed by biotechnology and pharmaceutical companies. They are among many in the business and scientific communities who fear not only an attack on their ability to raise venture capital and protect intellectual property but also a threat to American competitiveness worldwide.—FRED B CHARATAN, freelance journalist, Florida

First "no win, no fee" case to go to Lords

A case that could set an important precedent in English medical law may become the first "no win, no fee" case to go to the House of Lords. The mother of Patrick Bolitho, a boy admitted to hospital with breathing difficulties who had a cardiac arrest and sustained severe brain damage, wants to take the case to the Lords after losing by a two to one majority in the Court of Appeal in 1993.

Patrick Bolitho has since died, but the family wants to carry on his compensation battle. His mother, Valerie Holt, is too well off for legal aid but cannot afford to fund the appeal herself. Her solicitor, David Body, a medical negligence specialist at Irwin Mitchell in Sheffield, has agreed to take the case on a no win, no fee basis. Rules to allow such cases in England and Wales are expected to come into force next month.

In an unusual move, Mr Body is seeking quotes from insurers to cover the family against the cost of losing. The Law Society has arranged "after the event" insurance for

Junior doctor cleared of killing patient:

A Belfast crown court jury has cleared Dr Yin Yin Teoh, aged 25, of the manslaughter of Samuel Beers. She accidentally injected penicillin into a drainage tube inserted in his brain instead of into an identical tube in his arm at the end of a 14 hour shift. Dr Teoh had worked 110 hours the previous week.

UK health insurers to be investigated:

The Office of Fair Trading is to investigate the selling practices of groups such as BUPA and PPP. The office will look at whether private health contracts have hidden clauses and whether people are getting the payouts they expect.

Mexico has more cases of cholera:

The Mexican department of health has said that 507 new cases of cholera were reported last week, the largest number in a single week since the current strain of the disease appeared in 1991. Fifty of the cases were reported in Mexico City. Officials blame the hot weather and say that the forthcoming rainy season could aggravate the epidemic.

US Medicare bill fails:

The US House of Representatives has failed to pass a bill ordering Medicare trustees to recommend policy changes by 30 June to ensure the long term solvency of the programme.

BMA News Review wins gold award:

BMA News Review has been awarded the British Association of Industrial Editors' gold award for the best magazine. The annual awards are the largest of their kind for corporate publications in Britain, and this year there were 1500 entries.

AIDS deaths in Italy increasing:

AIDS is becoming almost as big a killer in Italy as road accidents, according to the country's statistics institute. In 1994 about 4370 Italians died from AIDS compared with 6000 who died in road accidents. AIDS has overtaken drugs as the second cause of death among young men between 18 and 29.

Replacement of NHS numbers delayed:

The NHS Executive is to delay the start of the programme for replacing existing NHS numbers with a new format until family health services authorities and health boards have set up electronic links with general practices to allow patient registration to be undertaken electronically.

an £85 premium for people bringing no win, no fee personal injury claims, but the society's insurers have refused to include the risky area of medical negligence. Other insurers, however, may step into the breach, possibly fuelling a rise in medical claims. One insurer, Litigation Protection, has already announced that it will offer cover for medical negligence cases.

Two year old Patrick Bolitho, who was recovering after an operation to correct patent ductus arteriosus, was admitted to St Bartholomew's Hospital in London in January 1984 with acute croup. Three days later he was discharged but was readmitted the following day with a high respiratory rate and intercostal recession on breathing. The next morning he was much better, but had reduced air entry on one side. During the day there were two episodes when he turned white then recovered his colour. Both times the senior paediatric registrar was bleeped but never arrived. On the second occasion the senior registrar bleeped the senior house officer to go in her place, but the latter's bleeper batteries were flat and she never received the message.

At 2 30 pm Patrick became agitated and started to cry. While a nurse tried to bleep the doctors again, the nurse sitting with the boy set off the emergency buzzer. He had a cardiac arrest, was revived, but sustained severe brain damage.

City and Hackney Health Authority admitted that the senior registrar was negligent in failing to come in response to the ward sister's calls. The issue was whether Patrick would have been intubated if she had come. The senior registrar said that she would not have intubated him, and a consultant called by the health authority said that he would not have done so either. Consultants called by the family said that they would have intubated Patrick before his collapse.

The High Court judge, whose judgment was upheld by Lords Justices Farquharson and Dillon in the Court of Appeal, held that the family had failed to prove that any competent doctor, in the senior registrar's position, would have intubated Patrick.

This decision has been criticised by medical negligence experts as wrongly applying the celebrated "Bolam" test for negligence (whether a responsible body of medical opinion would have done as the defendant did) to the quite separate issue of causation (whether the negligence caused the injury). Plaintiffs have to prove both negligence and causation to succeed.

The third Appeal Court judge, Lord Justice Simon Brown, said that the correct question in determining causation was, what would a doctor have done if one had arrived? That was for the judge to decide. It was "an irrelevance" that the health authority's expert witness represented a respectable body of medical opinion. The judge took account of generally accepted statements from published medical reports, including "any child who reaches the hospital alive should not ... die from upper airway obstruction." He believed that the answer to the question of whether an attending doctor should have, and therefore probably would

have intubated Patrick was yes.

Unusually, the Appeal Court gave leave for the case to go to the House of Lords. The court normally leaves it to the law lords themselves to decide whether to hear an appeal.—CLARE DYER, legal correspondent, *BMJ*

Britain ranks poorly for cancer survival rates

Survival rates among patients with cancer in Britain are worse than those among many of their European counterparts, according to a report published by the International Agency for Research on Cancer. The study found that in the worst case—stomach cancer—the five year survival rate among British patients was less than half the European average.

The Eurocare study uses data from 30 cancer registries covering 100 million people in 11 European countries and summarises the survival of 800 000 patients diagnosed as having cancer between 1978 and 1985. The researchers claim that this is the most ambitious study of its kind and the first to compare survival rates across Europe.

The study ranks countries by five year survival rates from diagnosis, allowing comparisons between countries and with the European average. The rankings are fairly stable for many cancers, though not all, leading the authors to suggest that the results of the study represent real differences in survival. Estonia and Poland were consistently bottom of the rankings, while patients in Switzerland, the Netherlands, and Finland did best overall.

European survival rates for bowel and breast cancer

Scotland and England were consistently in the bottom half of the tables for many malignancies. Patients with cancers of the stomach, colon, lung, breast, ovary, and cervix did particularly badly. However, in cancers for which chemotherapy is effective, such as testicular cancer, Hodgkin's disease, and the leukaemias, the results are much more consistent across the countries.

The report's authors warn that the data are not sufficiently standard for comparison of staging of disease at diagnosis or the efficacy of treatment in the different countries, though the investigators already have a new study under way that will address these areas in more detail.

Professor Michel Coleman of the London School of Hygiene and Tropical Medicine, said: "We cannot say that the survival differences are caused by poorer health care in the countries with poorer survival, but if the differences are due to delays in diagnosis and treatment then that is something we need to know about."—DOUGLAS CARNALL, *BMJ*

Eurocare First International Study of Cancer Survival Rates, UK and Europe is available from the International Agency for Research on Cancer, 150 cours Albert-Thomas, F-69372 Lyons, France, price £45.

Ebola threat eases

Zaireans and foreign health workers were cautiously hopeful this week that the worst of the Ebola epidemic was over (see editorial on p1344). Sunday saw the lifting of the blockade between the Kikwit region and the capital, Kinshasa.

Zaire's last outbreak in Yambuku, a small village, in 1976 killed 275 people. Kikwit, by contrast, is a bustling provincial town with half a million inhabitants.

The speed with which Ebola kills and the terror it has generated are the two main reasons why the disease did not spread further. The people of Kikwit avoid the hospital and leave the dead untouched in their homes. Since it is thought that Ebola cannot be transmitted as an aerosol these precautions prevent most infection.

Ebola virus has an incubation period of three days to three weeks. Initial reports from Kikwit suggested that this strain might be an even faster killer than those previously encountered. It is now believed to be the same strain that has struck Zaire and Sudan in recent decades.

The first known outbreak of viral haemorrhagic fever was at Marburg in Germany in 1967, where 25 workers who were extracting Ugandan monkey kidneys for polio vaccine became infected with a new and unknown virus. Seven later died. Professor David Simpson of Queen's University, Belfast, was among the team which identified the virus. The Marburg virus is a close cousin of Ebola.

Professor Simpson later led a World Health Organisation investigation into the 1976 Ebola outbreak in Sudan, which

Ebola: is the threat over?

coincided with the Yambuku epidemic across the Zairean border. He said that panic kept the disease in check in Zaire. "The hospital admitted a large number of feverish people who were believed to be suffering from malaria or perhaps typhoid. After being injected with shared needles a number fell extremely ill on their return home. The local chiefs decreed that the sick were to be left alone in their homes and buried in their floors when they died. The huts were then razed." In Sudan less rigid quarantine allowed a smaller initial outbreak to claim 151 lives.

Three quarters of the victims of the current outbreak have been medical staff. So far the disease has run its usual course of 50-90% mortality. It is now believed that the first case in the current outbreak was a Kikwit laboratory technician known only as Kimfumu. He had returned from a diamond hunting expedition in Northern Angola, and checked into Kikwit hospital complaining of fever. He died soon afterwards.

—OWEN DYER, freelance journalist, London

Britain to boost competitiveness and science

The British government this week reviewed its progress with attempting to reverse long term decline in the country's competitiveness and emphasised its commitment to science and innovation at a press conference led by the prime minister and including five cabinet ministers. This matters to health professionals because, as John Major, the prime minister, said: "Unless we can create the conditions for strong and sustainable

growth no government will be able to improve education and health, maintain strong defence, increase pensions, or provide care in the community."

"UK Plc," as it was called by Michael Heseltine, president of the Board of Trade, has been in decline for a century. The "competitiveness gap" between the UK and other major economies has become pronounced since 1945. The UK fell from third in real income per head in Europe in 1950 to 10th by 1979. In 1950 British productivity in manufacturing industry was 10% higher than in Germany and twice that in Japan; by 1979 German productivity was 10% higher and Japanese a third higher. Britain's share of world trade in goods fell from 10.5% to 5.3% over the same time.

A 1994 white paper identified 10 factors influencing competitiveness, including education and training and innovation. The report published at the press conference, *Competitiveness: Forging Ahead* (available on the Internet at <http://www.hmsoinfo.gov.uk/hmso/document/dti-comp/dticomp.htm>), reviews progress with strategies covering all 10 factors. The picture on education and training is mixed: Britain had a first degree graduation rate of 21%, higher than Germany (14%) and France (15%) but lower than Japan (24%) and the United States (27%), but the participation rate of 16 and 17 year olds in education is still lower than in most major competitors.

Innovation, the report says, is more than research and development and science and technology and is best defined as "the successful exploitation of new ideas." Britain's gross expenditure on research and development declined as a proportion of gross domestic product from 2.27% in 1985 to 2.19% in 1993, and the proportion funded by government fell from 43% to 32%. Most major competitors spend much more on research: the United States 2.79% of gross

domestic product, Germany 2.48%, Japan 2.8%, and France 2.41%. The proportion of research expenditure on defence (14%) has fallen from 22% in 1985 but remains higher than many competitors — for instance, Japan (0) — but is now lower than in some competitors — the United States (21%) and France (16%). The report discusses definitions of truly innovative companies — those that “generate a culture in which people welcome change, continuous improvement and risk taking, translate values into action, and listen to their customers” — and finds that only in 10 British companies is qualifies as innovative.

A centrepiece of the government’s attempt to make sure that research and development translates into economic and social progress is the foresight programme, and the government this week published the report from the steering group of technology foresight and announced a further £110m for the programme. The process of foresight brings together industrialists, scientists, engineers, and government to identify opportunities in markets and technologies likely to emerge in the next 10-20 years and the actions that will be needed to exploit them. The government has 15 foresight panels, including one on health and life sciences.

The health sector, notes the report, employs some 1.7 million people in Britain, earns a trade surplus of £2 billion (when most sectors have a deficit), and represents about 5% of gross domestic product. Britain has several of the world’s leading pharmaceutical companies, and expenditure on research is 21% of sales compared with less than 3% for most companies in manufacturing. The health and life sciences foresight panel sees enormous opportunities in molecular genetics and bioinformatics, but observes that “in 15 years time the cost of treatment rather than the lack of knowledge will probably be the chief limiting factor in the treatment of most of today’s currently incurable diseases — if that is so, science and technology will increasingly be targeted at reducing cost.” — RICHARD SMITH, *BMJ*

Competitiveness: Forging Ahead (cmd 2867) is £19.50 and *Progress Through Partnership: the Report from the Steering Group of the Technology Foresight Programme 1995* is £25 from HMSO.

Traffic victims call for help

Relatives of people killed in road traffic accidents suffer permanent psychological damage, with one in four feeling suicidal three years after the event, says a report this week from the European Federation of Road Traffic Victims. In a questionnaire survey of over 1000 people in Europe about half admitted to using tranquillisers for “extended periods.”

The federation, sponsored by the European Commission, consists of 18 organisations representing people involved

Road accidents: shocking, and dealt with lightly by British courts

in road accidents and their families. Its first report in 1993 also found considerable psychological morbidity as well as a fall in living standards. In Britain in particular, the report finds, there is little support for bereaved families.

Brigitte Chaudhry, founder of RoadPeace, a British organisation, said that while relatives of murder victims had access to Victim Support—a national network funded by the government—those bereaved by road accidents had no statutory help. “The death of a child in a road accident is so unnatural and so unexpected it’s utterly shocking. You cannot expect people to find bereavement organisations because they can barely get dressed,” said Ms Chaudhry. “Sometimes there is no liaison between the hospital and the family’s general practitioner and there is no support for them at all.”

The federation believes that the government should fund information booklets that police and emergency services should give out to relatives. Marcel Haegi, president of the federation, said, “The Swiss and French have government funded centres and telephone helplines for the families of victims of road accidents which offer social and psychological and religious assistance. These families have higher rates of depression and psychosomatic illness and have shorter lifespans.

“Much of the suffering of bereaved relatives, particularly in Britain, comes from their dissatisfaction with the criminal justice system. They feel they are not treated with respect.”

Under British law most drivers who kill people in road accidents are prosecuted for traffic offences such as dangerous driving which is dealt with in magistrates courts. RoadPeace says that only 200 cases a year result in criminal rather than civil prosecution and reach crown courts. It argues that refusing to treat the death or injury as a

central issue in driving offences increases the suffering of bereaved families.

Andrew Miller, member of parliament for Ellesmere Port and Neston, said, “We would like to restructure the law to be able to charge people with motor manslaughter.”

—LUISA DILLNER, *BMJ*

Overseas doctors coming to Britain need language test

All overseas doctors who want to do specialist training in the United Kingdom should be required to pass an English language test, says a government working party. It recommends that doctors should be able to take the test outside Britain and would have to pass it before taking a test of clinical competence.

The working party is one of three set up to consider the implications of Britain’s new specialist training grade. Having uniform language and clinical tests would, argues the working party, ensure that all overseas doctors are treated equitably.

The three reports, issued last week for consultation, deal with particular subgroups of doctors affected by the new arrangements for higher specialist training: overseas doctors, general practitioners, and academics. The new training grade, that of specialist registrar, is designed to provide shorter, more structured specialty training, in line with the European Union’s requirement for the free movement of doctors. Overseas doctors—those from outside the European Economic Area (the European Union and the old countries from the European Free Trade Area)—currently

make up 26% of all junior hospital doctors. The working group wants them to be able to gain places on the new training programmes if they can meet the same standards of entry as British doctors. Doctors who come for general professional training or basic specialty training in the senior house officer grade will continue to have to take the clinical component of the PLAB (Professional and Linguistic Assessments Board) test.

The report on overseas doctors has been delayed over the issue of whether doctors completing higher specialist training are eligible for the certificate of completion of specialist training, the qualification recognised within the European Economic Area. The working party recommends that overseas doctors should receive the certificate but that this will not necessarily entitle them to practise in other countries in the European Economic Area.

The report also recommends a two to four week induction period for all overseas doctors, funded jointly by postgraduate deans and the employing trust; better information before doctors come to Britain; and a review of sponsorship arrangements. It leaves to others the question of how many higher specialist training places will be available to overseas doctors.

The key recommendation from the working party on academic and research medicine is that the new training programmes should be flexible enough to accommodate research periods of varying length, properly supervised. It does not think that all doctors need to spend as long as a year doing research.

The general practice working party's chief recommendation is that the current three year vocational training period should be supplemented by a period of further

education, though this should be voluntary until it is widely accepted and resources are available. The working group also recommends better planning locally to make senior house officer posts more relevant to general practice. Resources for vocational training should be transferred from the general medical services budget to regional postgraduate deans.—JANE SMITH, *BMJ*

Hospital Doctors: Training for the Future. Supplementary reports on general practice, overseas doctors, and academic research medicine are available from the NHS Executive, Leeds. The consultation period ends on 18 August.

Spanish doctors strike over pay

Spanish hospitals have been virtually paralysed for the past fortnight because of a strike by doctors affecting 13 of the country's 17 independent states. About 20 000 operations and half a million consultations have been cancelled so far.

The state medical workers' union, the CESM, is backing the conflict, which centres on the doctors' demand for a pay rise of 100 000 pesetas (£510) a month. The 26 000 doctors involved want parity with their better paid colleagues in the northern state of Catalonia and in the Basque country. The action involves an estimated 65% of the country's public hospitals, with only emergency services being provided. The only elective surgery being carried out is on patients with cancer.

Spain's health minister, Angeles Amador,

has said that the doctors' demands are impossible to meet. She has offered a rise of 30 000 pesetas but has said that only those doctors who agree to increase productivity will be eligible. She is particularly concerned at the length of Spain's waiting times for surgery—currently 200 000 people are on the list.

The doctors also want more job security—around 50% of Spain's health service doctors are now on temporary contracts.

The CESM claims that 85% of its members support the strike, but the management disputes this and says that the figure is nearer 25%. Hospital managers have also complained that the strike has caused excessive delays in discharging patients who are ready to go home.

The health ministry is arranging for patients who were due to have operations several weeks ago to be diverted to private clinics. Negotiations between unions and management were at deadlock at the time of going to press, with other groups of health workers, including nurses, now also considering calling a strike.—VINCENTE MATEU, freelance journalist, Madrid

Consent is not always essential, say Dutch experts

Medical experiments on patients who are unable to give consent, such as children and people with learning disabilities, are acceptable under strict conditions, according to a Dutch expert advisory committee. Such research, which may include the early stages of testing of medical products or using the patient in a control group, is seen as essential for the development of care for patients with conditions such as Alzheimer's disease and Down's syndromes.

Even though research may not directly benefit the individual patient, it is seen as indispensable to reduce the hazards for others. The advisory committee, which was reporting to the Dutch government, was set up last year by Supreme Court attorney general Professor Leo Meijers to give a combination of medical, legal, and ethical opinion. This followed a row in parliament over a proposed new law on medical trials. MPs opposed research that would not directly benefit individual patients, especially when consent was impossible.

But the importance of this non-therapeutic research was highlighted in the report, which gave as an example a comparison of blood samples from patients with Alzheimer's disease with samples from healthy adults. Such research, says the report, is essential "to progress in and improvement of the quality of health care of children, the mentally handicapped and people suffering from senile dementia."

The strict conditions called for in the report include seeking the approval of the hospital medical ethics committee, ensuring that the risk to the patient is insignificant,

Medical students petitioning Downing Street last week for an annual increase of £1000 in their government financed loans. Marc Swan, chairman of the London Medical Students Group, said, "Debt is deterring the less well off from entering medicine."

and receiving permission from the patient's representative. Scientific results must be obtainable only through research on this category of patients, and the possibility of using competent adult volunteers must have been excluded.

The report says that whenever possible an attempt should be made to gain informed consent, for instance by explaining to a child the need for medical testing. Then if there is an objection research should stop.

One of the report's authors, Dr Ietje Glaudemans-van Gelderen, who works with people with learning disabilities said, "Medical research is absolutely necessary to know the cause of handicaps so we can treat them. Some knowledge cannot be gained in any other way. We want these patients to get the same chances and medical care that everyone gets."

The federation of parents with handicapped children accepted that there was a "moral justification" for non-therapeutic research if it benefited the whole group of patients. But it emphasised that strict conditions were necessary for such vulnerable patients and called for expert representation on medical ethics committees.

The committee's report could clash with

a European Union directive on good clinical practice, which requires non-therapeutic research to be endorsed with the signature of the subject. The committee has asked the government to consider challenging European law.—TONY SHELDON, freelance journalist, Utrecht

Patient packs to come on stream in Britain

All patients in Britain are to receive their prescribed medicines in the manufacturer's pack, complete with a full information leaflet, following agreement between all those concerned. The move, to be introduced in a three year rolling programme, will begin in December.

The new rules will apply to both branded and generic medicines. The first products to come under the ruling will be those for peptic ulcer, antiviral drugs, cholesterol reducing drugs, and systemic corticosteroids.

These will all be required to come in the manufacturer's pack from December this year. Those products not currently in patient packs will need a longer time to change and will do so later in the three year programme.

The agreement follows 18 months of discussions between the BMA, the Royal Pharmaceutical Society of Great Britain, the Pharmaceutical Services Negotiating Committee, the Medicines Control Agency, the Department of Health, the British Generic Manufacturers' Association, and the Association of the British Pharmaceutical Industry. By the end of the rolling programme in September 1998 more than 40 different categories covering some 11500 medicines should have been converted to patient packs.

Dr Richard Tiner, a member of the General Medical Services Committee's prescribing subcommittee, said that it was a good way of encouraging compliance among patients. He said: "GPs need to know that there will be a great deal of back up information to help them explain the situation to patients when the time comes, to reduce resistance." He added that the new packs would cost money but would reduce wastage in drug administration.—CLAUDIA COURT,

Focus: Sydney

New infection control measures miss the point

This month the New South Wales government will introduce new regulations for infection control in hospitals and health care settings. This

seemingly unremarkable announcement has attracted much press comment, with Professor Peter McDonald, chair of the National Health and Medical Research Council's infection control working party, expressing surprise that the existing powers of the Public Health Act were apparently seen as inadequate.

McDonald's reported surprise is itself surprising, given his long involvement in the politics of AIDS control in Australia. Because New South Wales has had most cases of HIV and AIDS it has also been subject to more political fallout from HIV than elsewhere in Australia. The recent history of HIV and hepatitis C infection scares in New South Wales health care settings has compounded the community's perceptions of maladministration in health services.

In 1993 four patients attending a suburban surgeon's rooms became infected with HIV in an apparent case of patient to patient multiple transmission (the surgeon was HIV negative). In May 1994 another four at a private hospital contracted hepatitis C. Then in August last year the largest health news story of the year erupted when

it was revealed that an HIV positive obstetrician had performed surgery on 149 women at Sydney's King George V Maternity Hospital. As predicted, none were infected by the doctor, but the episode passed on virulent antibodies to public confidence about the safety of hospitals.

That story ran for nearly three weeks; journalists used the narrative of a hunt for the missing, possibly infected, women to sustain an attack on the public hospital system. It was, the media said, placing patients at risk of dreaded diseases like AIDS. The framework of the attack was one of them and us—"them" being male homosexual or injecting drug user doctors who were being allowed to pollute a quintessential "us"—innocent mothers and babies. As the wide eyed husband of one of the women said on television: "I'm pretty shocked about it to be honest with you. These are sort of medical people ... you put your life in their hands."

Interviewers interrogated New South Wales's chief health officer George Rubin about how "the system" had failed to prevent an HIV positive (assumed to be gay) doctor from performing surgery. Put on the spot Rubin offered "regular testing" of all health care workers. This was rapidly rejected by medical groups and AIDS groups as unworkable and industrially inflammatory.

What the new 20 page infection control policy does not acknowledge is this element

of outrage. It soberly re-emphasises the application of universal precautions as well as giving specific advice about hand washing, lesions, protective clothing, disposal of sharps, and so on. Nevertheless, the document is coy about the very issues that have prompted the most heated debate—the HIV and hepatitis C status of patients and health care workers. A section on patients with "communicable diseases" makes it explicit for the first time that operating theatre and anaesthetic staff should be informed about a patient's status and that transfer of a patient to "a more appropriate facility" may be considered. Remarkably, the policy says nothing at all about health care workers who are HIV positive or carriers of hepatitis B or C.

The document's assumptions about risk are grounded in a traditional view of infection control focused on pathogens but oblivious to the reasons why minimally risky situations become the source of damaging community panics.

There is now an extensive literature on the sociology of risk perception and communication. Again and again this work shows that it is the "outrage" components of risk which amplify very small risks into community panics. All this seems to have passed by the architects of New South Wales's new policy—who have simply defined the problem as one that may be solved by more scrubbing, scalding, and sterilising.—SIMON CHAPMAN, associate professor of public health, Sydney