

NEWS

UK drug misusers targeted for better clinical care

The UK's first "Drug Czar" has unveiled his 10-year strategy for tackling drug misuse, heralding a shift in anti-drug spending from prisons to treatment and education. Launched on April 27, the White Paper states that "for the first time, a proportion of assets seized from drug barons will be channelled back into anti-drug programmes".

In the White Paper, Drug Czar, Keith Hellowell, formally known as the UK anti-drugs coordinator, identified four key areas to be targeted, including treatment and harm reduction. The key priority in this area is to increase the participation of problem drug misusers, including



Target of clinical care

prisoners, in effective drug-treatment programmes. The Department of Health is to publish revised clinical guidelines with particular reference to prescription of substitute medications, with which future clinical services will be assessed. Other performance indicators include reducing the number of drug misusers denied immediate access to appropriate treatment, and reducing the proportion of drug misusers who inject and who share injection equipment.

Guidance published with the White Paper describes the success of the introduction of needle-exchange schemes and education programmes on safe-injection

practice in reducing the prevalence of HIV in injecting-drug users. Nevertheless, says the guidance: "We need to consider to what extent the current approach to harm reduction with drug injectors is effective in tackling Hepatitis, in particular how to improve rates of vaccination for drug users for Hepatitis B, and whether the distribution of clean drug injecting paraphernalia (in addition to needles) is effective in reducing transmission of Hepatitis C."

Answering questions on the White Paper in the House of Commons, the Leader of the House, Anne Taylor, emphasised that no moves would be made to decriminalise cannabis used for medical purposes. But she pointed out that trialists can and do apply for Home Office licences to investigate putative therapeutic properties of cannabis and cannabinoids.

Sarah Ramsay

USA continues federal ban on needle-exchange funding

On April 20, the Clinton administration shocked the AIDS community by failing to lift the federal funding ban on needle-exchange programmes despite saying that such initiatives effectively reduce HIV spread without encouraging illegal drug use.

"The scientific evidence indicates that needle exchange programs do not encourage illegal drug use and can, in fact, be part of a comprehensive public health strategy to reduce drug use through effective referrals to drug treatment and counselling", said

... but philanthropist offers funds

On April 23, in response to the decision taken by the Clinton administration, philanthropist George Soros offered US\$1 million in matching funds to support US needle-exchange programmes. Soros, who donated \$1 million last year to fund needle-exchange programmes, challenged other philanthropic organisations, local governments, and individuals to "join me in supporting these life-saving programs". □

a Department of Health and Human Services' statement. But, it went on, "The Administration has decided that the best course at this time is to have local communities which choose to implement their own programs use their own dollars to fund needle exchange programs".

HHS Secretary Donna Shalala had been under pressure to make a decision since the end of March, when a Congressionally-imposed funding ban expired, with the proviso that no federal funds could be made available unless she declared needle-exchange programmes effective in preventing HIV spread without encouraging drug use. As late as April 19, it seemed that the ban would be lifted, despite the continuing opposition of Barry McCaffrey, the administration's top anti-drug official, who feared that federal funding would send a tacit message to children condoning use of injectable illegal drugs.

But while travelling back from Chile, President Clinton apparently changed his mind about proceeding with what would have been a highly divisive issue on Capitol Hill, where Republicans are still vowing to ban federal needle-exchange funding permanently. At the last minute, Shalala cancelled a scheduled news conference and instead delivered the news at a small camera-free briefing.

"This administration has shown a callous disregard for the disproportionate impact this decision will have on communities of colour and women", said Pat Christen of the San Francisco AIDS Foundation HIV Prevention Project, which operates the USA's largest needle-exchange programme. Of the administration's decision to validate the science but still deny funding, Daniel Zingale of AIDS Action said: "It's like saying the world is not flat but not funding Columbus' voyage."

Julie Rovner

An aspirin a day may not keep colon cancer at bay

Several studies have indicated that aspirin may reduce colorectal-cancer risk, but a new report finds no evidence for a risk reduction. Analysis of post-trial data from the Physicians' Health Study, a 12-year cohort study started in 1982 and involving more than 22 000 male US doctors, indicates that aspirin offers no protection against the disease (*Ann Intern Med* 1998; **128**: 713–20).

Trial participants took 325 mg of aspirin or placebo on alternate days and 50 mg of β -carotene or placebo, also on alternate days. The aspirin arm of the study was stopped in 1988, because the risk for first myocardial infarction had fallen by 44% in the aspirin group. 71% of participants chose to continue taking aspirin along with β -carotene or placebo—the β -carotene arm of the trial continued until the study ended.

341 cases of colorectal cancer were diagnosed during follow-up. The researchers found no difference in colorectal-cancer risk between participants not regularly taking aspirin, those who stopped regular use when the aspirin arm of the trial ended,

those who started taking aspirin after this timepoint, and those who took aspirin throughout the study period.

Several observational studies have shown a 40–50% reduction in colorectal-cancer incidence and mortality in people regularly taking aspirin. Aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) are thought to suppress carcinogenesis partly by inhibiting cyclo-oxygenase 2, an inducible enzyme that makes tumour cells resistant to apoptosis.

The authors suggest that “the low dose of aspirin used and the short treatment period could account for the null findings”, but nevertheless conclude that “clinicians should be cautioned about using salicylates (or other NSAIDs) for the primary prevention of colorectal cancer”.

Christos Paraskeva (Bristol University, UK) notes that, despite these results, “the potential rewards of reducing a substantial number of deaths through understanding NSAID action remain”. Intervention studies are now underway.

Dorothy Bonn

Colposcopists discuss abnormal smears

The increasing number of borderline cervical smears and the problems they pose for colposcopy services were discussed by the British Society for Colposcopy and Cervical Pathology in Cheltenham, UK, on April 23–25.

Mary Packer (South Cleveland Hospital, Middlesborough, UK) reported that persistent borderline smears—two smears taken 6 months apart—now account for 61% of colposcopy referrals, compared with 35% a year ago. A colposcopy audit done on 156 such women revealed no abnormality in 20% of them. Only 6% had high-grade abnormalities (CIN 2 or 3), while 18% had CIN 1. On the basis of these findings, the criteria for referral to colposcopy have been changed to three borderline smears 6 months apart, or two borderline smears 12 months apart.

Could screening be stopped at 50 in women with a satisfactory negative screening history, asked Grainne Flanely (Queen Elizabeth Hospital, Gateshead, UK)? The suggested criteria for not screening after age 50 are: the woman should have had at least two negative smears; she should never have had an abnormal smear;

and her last smear should have been taken not more than 5 years earlier. But should smears with borderline changes count as positive or negative?

In collaboration with the UK screening programme, an audit has been carried out of smear results from 1988 to 1996 of all women aged 50 or more in five UK districts. The study included more than 400 000 smears taken from 173 000 women. Only 21% of women had a satisfactory negative smear history before age 50. Women who had had a smear showing mild dyskaryosis or worse before 50 were four times as likely to have a subsequent abnormal smear as those who had a negative smear history (8% *vs* 2%). Women who had had a borderline smear before age 50 were also at higher risk of a subsequent abnormal smear. Women with a history of any degree of dyskaryosis should continue with screening after age 50, concluded Flanely. The data are more optimistic for women with a satisfactory negative smear history, but it is too soon to advise cessation of screening, she added. The data will be reviewed again in 5 years' time.

Anne Szarewski

Pain management poorly taught in USA

US medical schools have often been criticised for poorly preparing students to care for patients with chronic pain. According to data presented at the annual meeting of the Society of General Internal Medicine (Chicago, IL, USA; April 23–25), 40% of new US graduates reported that they had received no instruction in pain management in medical school. Only 20% said that they had received instruction during both preclinical and clinical years.

The study, done by Wayne Ury of New York Medical College (NY, USA), was based on a questionnaire completed by 48 new interns—all US graduates—at St Vincent's Hospital and Medical Center, New York. 75% said that they had managed three or fewer patients with chronic pain at medical school, and 79% said that they had observed three or fewer patients on a morphine infusion. 45% of the new doctors said they were uncomfortable dealing with pain management.

“I was not surprised by the lack of education reported by the graduates”, said Ury, “but I was surprised by the degree of these results. Clearly, there is a need for greater research in pain-management education as well as a need for changes in medical school curriculum”.

David Frankel

News in brief

New chairman for UK MRC On April 28, it was announced that Sir Anthony Cleaver will become the new chairman of the UK Medical Research Council in October.

Gene forces failure Hereditary idiopathic dilated cardiomyopathy (IDC) may have a genetic basis, report a US team. The researchers found two mis-sense mutations in the cardiac actin gene (*ACTC*) that cosegregated with IDC in two unrelated families (*Science* 1998; **280**: 750–52). Since actin transmits contractile force, the team proposes that “IDC results from an episodic defect in force transmission”, which predisposes to mechanical injury, cell death, and secondary fibrosis.

Second drug said to reduce breast-cancer risk

Just 2 weeks after US researchers announced that tamoxifen had reduced breast-cancer incidence by almost half in women at high risk for the disease (see *Lancet*, April 11, p 1107), news has broken that raloxifene, a selective oestrogen-receptor modulator approved in the USA for treatment of osteoporosis, may also reduce breast-cancer risk.

Results of two studies, obtained by financial analysts, were reported on April 20 on the front page of the *Wall Street Journal* even though the results were under embargo until the meeting of the American Society of Clinical Oncology

(ASCO) later this month (May 16–19). In response to the media reports, ASCO released abstracts for the studies but warned that the data in the abstracts were several months old and very preliminary. The researchers have been asked not to comment until after presenting their data at the meeting.

The first study—lead author Victor Jordan (RH Lurie Cancer Center, Chicago, IL, USA)—combined safety data from randomised trials of raloxifene for treatment of osteoporosis involving more than 12 000 postmenopausal women. According to the abstract, there

was a 58% reduction in breast-cancer risk among women on raloxifene compared with those on placebo. Median exposure to the drug was only 28 months.

Steven Cummings (University of California, San Francisco, CA, USA) and colleagues looked at data from an osteoporosis trial involving 7700 women. After a median follow-up of 28.9 months, the researchers found that there was a 75% reduction in breast-cancer risk among women taking the drug compared with those taking placebo.

Michael McCarthy

Genes described that may help protect against cancer development

Not all smokers get lung cancer, and not everyone with a fibre-poor diet gets colon cancer. Scientists think that genetic variations in carcinogen metabolism may be behind these different susceptibilities. Two new reports lend support to this idea.

Roland Wolf (Ninewells Hospital, Dundee, UK) and colleagues are studying glutathione S-transferase (GST). One subclass of this detoxifying enzyme, pi-class GST, has been implicated in tumour development. The scientists now report that mice in which both copies of the pi-class GST gene have been removed develop three to four times more skin

cancers when painted with a carcinogen and a tumour promoter than do wild-type mice (*Proc Natl Acad Sci USA* 1998; **95**: 5275–80). The authors say that the difference in tumour incidence “provides direct evidence that a single gene involved in drug metabolism can have a profound effect on tumorigenicity” and shows that GST may be an important determinant in cancer susceptibility.

Another enzyme highlighted this week is microsomal epoxide hydrolase. David Harrison and his team at the University of Edinburgh, UK, tested whether people with bowel cancer had a less active variant of this

detoxifying enzyme than healthy people. The results released, by the UK Cancer Research Campaign on April 27, show that a less active form of epoxide hydrolase is present in 5% of the general population but in 20% of people with bowel cancer. These preliminary results “indicate an association, not a mechanism”, cautions Harrison. “Similarly, the Dundee results are not conclusive proof of why only some people get lung cancer. Any implication that these results may rapidly lead to a cure to cancer is probably hype.”

Jane Bradbury

More effort needed to halt osteoporotic bone loss

“Steroid-induced osteoporosis is a problem that is not being effectively tackled”, said Jonathan Tobias (Bristol, UK) at the British Society for Rheumatology meeting in Brighton, UK (April 22–24). About 0.5% of the general population is receiving long-term steroid therapy, but in a general practice survey only about 14% had taken some form of preventative treatment for bone loss, he reported.

Steroid use leads to an increased risk of fractures, and patients with rheumatoid disease are especially vulnerable since about half are long-term users of steroids. But who should be treated for bone loss and how? Tobias suggested that patients

on prednisolone 7.5 mg or more per day for 6 months or longer should be targeted for prophylactic therapy for



Prevention instead of repair

bone loss. Vitamin D and calcium supplementation should be considered in all patients. Postmenopausal women and premenopausal women with ovarian-hormone deficiency should start hormone replacement therapy (HRT). Alendronate sodium and etidronate should also be considered for prevention or treatment of steroid-induced osteoporosis.

Patrick Garnero (Lyon, France) reported that the C-terminal (CTX) and N-terminal (NTX) peptides of type-1 collagen were helpful biochemical markers for prediction of

bone loss in osteoporosis. In the OFELY study of 1000 women in Lyon after 4 years of follow-up, postmenopausal women (none of whom was on HRT) with abnormal urinary CTX or NTX peptide values—ie, greater than those in premenopausal women—lost two to five times more bone than those in whom marker values were normal. CTX and free deoxyypyridinoline have also proved highly predictive of hip-fracture rate in osteoporosis, independent of bone mass.

The gold standard for monitoring bone-loss treatment is repeat measurements of bone-mineral density over at least 2 years, but Garnero noted that biochemical bone markers could be useful in monitoring treatment more quickly, and in identification of who will respond to therapy.

Stephanie Clark

Thwarting the dwindling progression of cachexia

When a patient develops cachexia, many doctors mistakenly think they can do little to help. Wasting has long been associated with “terminal or progressive diseases that one could not do much about”, explains Gilla Kaplan, an immunologist at Rockefeller University (NY, USA). But research is now providing “some reasonably effective tools for intervening, and so the concept that you can actually do something about wasting is slowly gaining a foothold”.

For oncologist Alexander Knuth of Krankenhaus Nordwest, Frankfurt, Germany, acceptance of this concept cannot come soon enough. In parts of Europe, he says, “nihilistic” thinking about cachexia means that patients who might benefit from treatment rarely receive it. Treatment can often improve quality of life and Knuth believes that “physicians’ frustrations with cachexia should not prevent patients from at least trying to get appropriate therapy”. Ironically, one of the most hopeful therapeutic drugs currently available is thalidomide, first launched 40 years ago, but now rarely used because of its teratogenic effects (see *Lancet*, April 18, p 1197).

Cachexia, a syndrome of progressive weight loss and muscle wasting that occurs in HIV disease, cancer, tuberculosis, and other chronic and infectious diseases, has many causes. Anorexia, fatigue, depression, gastrointestinal obstruction, diarrhoea, and malabsorption may all cause reduced calorie intake and wasting. Metabolic disturbances, particularly increased resting-energy expenditure, are also involved. “During episodes of weight loss, when caloric intake is reduced, patients with HIV-associated wasting tend to remain hypermetabolic”, notes Morris Schambelan (University of California, San Francisco, CA, USA), who is investigating cachexia in HIV/AIDS. “Not eating should be associated with a reduction, not an increase, in metabolism.”

In cancer, cachexia is thought to be driven at least in part by tumour-related factors, while in HIV/AIDS, wasting is often the result of a secondary infection. Because cachexia can have so many causes, treatment is tricky. The most direct approach is to treat the underlying illness. This works in curable diseases, such as early-stage tuberculosis. But in cancer, HIV disease, and other progressive diseases, additional measures are needed. “Simply giving

calories is not the answer”, explains Schambelan. “When you refeed patients, they tend to accumulate fat, not lean tissue.” On the other hand, increasing appetite and weight—even if mainly fat—can be useful as a supportive measure, comments Knuth, who uses appetite stimulants such as megestrol acetate to enhance wellbeing, particularly in cachexic patients with gastrointestinal tract or non-small-cell lung cancers.

Newer approaches to cachexia are aimed at directly increasing lean-tissue mass. Therapy with growth hormone increases weight, lean-body mass, and endurance in HIV-infected patients. Insulin-like growth factor-1 and anabolic steroids also add lean-body mass as well as fat. Although these strategies have not been studied in placebo-controlled trials of sufficient duration to show improved survival with therapy, “the inference is that because wasting is bad, if you can have a therapy that reverses wasting, it’s probably good”, says Schambelan.

Most recently, thalidomide has emerged as a promising treatment for HIV-disease-associated cachexia. Thalidomide is thought to be a specific inhibitor of tumour necrosis factor- α (TNF- α ; also known as cachectin), a cytokine implicated in the development of cachexia and in the pathogenesis of diarrhoea in HIV disease. Kaplan and co-workers have tested thalidomide in patients with HIV-associated wasting. Patients given thalidomide had a mean weight gain of 5.1%, but patients given placebo put on only 1% of body weight. Another study showed that thalidomide caused weight gain and lean-tissue anabolism in patients with HIV disease even when calorie intake was kept constant (*AIDS Res Hum Retroviruses* 1997; **13**: 1047–54). “Thalidomide seems to be at least as good as some of the other drugs that reverse wasting in terms of the percent of gain that is lean-body mass, not just fat or fluids”, says Kaplan. Thalidomide is also being tested in combination with antiretrovirals and other anti-HIV therapies to see whether it might help reverse HIV-related immune

damage, as well as cachexia.

For now, notes Schambelan, it may be easier to treat wasting in HIV disease than in cancer. “It’s more difficult to produce remedies that are going to work when primary tumour growth continues unabated. But with

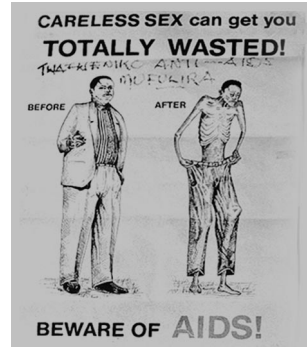
HIV, now that viral infection can be stabilised, getting people with HIV disease who have had wasting back up to a more appropriate weight seems like a reasonable goal.” But although enthusiastic about the potential benefits of thalidomide, Schambelan remains concerned about thalidomide’s teratogenic effects if used in an uncontrolled way.

However, research has implicated a number of pro-inflammatory cytokines in addition to TNF- α in wasting in HIV/AIDS and cancer, so no doubt specific inhibitors for a number of cytokines will be developed and tested for treatment of cachexia.

Other strategies to treat wasting are being developed for the future. Se-Jin Lee (Johns Hopkins University, Baltimore, MD, USA) has discovered a protein, myostatin, expressed in many higher organisms, including human beings, that controls muscle mass. Mice that lack the myostatin gene have two to three times as much muscle as normal mice; cattle with myostatin mutations are heavily muscled. “This gene somehow seems to limit the amount of muscle you have. Our assumption and hope is that by interfering with its function in people, we might be able to add muscle mass in patients with cachexia and muscle-wasting diseases”, says Lee.

Elsewhere, the biotechnology company ProScript (Cambridge, MA, USA) and Hoffman-LaRoche are developing small-molecule inhibitors to mitigate the progressive degradation of skeletal muscle that occurs during wasting episodes in cancer. According to executive vice-president Julian Adams, these inhibitors could be ready for clinical trials in a few years. Clearly, treatments for cachexia are evolving. And, as Knuth rightly observes, “we now have more reasons than ever for optimism”.

Marilynn Larkin



Zambian public-health poster draws attention to cachexia

Panos Pictures

LONDON **Labour's disappointing first year for health**

A year that opened with cheers ended in jeers. Frank Dobson, the UK Health Secretary, cheered by the annual conference of the Royal College of Nursing last year at the beginning of the Labour government was jeered last week at the same gathering by nurses angry over the staging of their pay award.

The nursing profession is in trouble. Facing critical recruitment and retention problems (one in four nurses will be eligible for early retirement by the year 2000), it believes that only better pay and more job satisfaction will resolve the dilemma. All that Dobson was able to offer was a £14-million (US\$23-million) programme to extend limited prescribing by community nurses. But it is not all bad news for the Health Secretary. His intelligent policy paper in December set the National Health Service on an evolutionary rather than revolutionary road.

Labour has appointed the country's first minister for public health and is setting up a new food-standards agency, which belatedly will put consumers' interest before producers' interests. Then there was his inheritance: a two-tier health service in which general-practitioner fundholders (family doctors with their own budgets) could get preferential access to hospitals for their patients; a service deep in debt with one in three health authorities and one in four hospital trusts running deficits which in aggregate exceeded £300 million; and an accumulated £10-billion backlog of repairs.

On a personal level, Dobson, an Old Labour figure, has been a surprise hit in the New Labour team,

winning plaudits from political journalists for his parliamentary performances and handling his many media interviews with skill. On no other issue was Labour further ahead of the Conservatives than on health in the run-up to the election. Health was identified by voters as their number-one issue—Labour was so far ahead it waited until there was only 2 weeks to go before it launched its health message of "14 days to save the NHS". Yet, in an ICM/*Observer* poll last Sunday in which 1000 people were re-interviewed 1 year on, public confidence in Labour's handling of health has fallen. From being their strongest card, it has fallen to sixth place.

"Medics and managers are fully aware of the shortage of money"

What's gone wrong? The first mistake was made even before voting day when Labour decided to stick to Conservative spending programmes for its first 2 years—programmes that would certainly have been increased by the Conservatives. Dobson's first 6 months were spent fighting for more money behind doors while publicly defending an indefensible low health-spending settlement. He did win an extra £300 million for the winter crisis, £500 million to bring down waiting lists, and £1.2 billion extra for the current financial year but with only a 2.7% increase this year, the NHS is still struggling. The Tories launched their health reforms with a 7.2% increase.

Medics and managers are fully aware of the shortage of money.

That's why nursing pay is being staged. But the public has simpler yardsticks. Against advice, Labour chose a reduction in hospital waiting-list numbers as one of its five "early pledges" for reform. In February, the quarterly statistics showed the reverse had happened: waiting lists had grown by 108 000 to a record 1.3 million. More seriously, the number waiting longer than 12 months had risen by 19% to 68 300. Dobson won credit for not blaming the Conservatives, but Labour was damaged publicly because its "political" target had boomeranged, and professionally because it should have had a more serious goal, such as reduced waiting times.

Its good work on public health—including a ban on tobacco advertising—was hurt by its U-turn on tobacco sponsorship, where it not only campaigned to exempt Formula One racing but was found to have received a £1-million donation from the Formula One boss. Its public-health policy paper won plaudits for recognising the links between poverty and poor health, but failed to set targets for reducing health inequalities.

No 5-year government should be judged by its first year. The government is flush with funds and there is hopeful speculation that there will be a big increase in health spending on the 50th anniversary of the NHS in July. But this first year was a disappointment with the least discussed policy—Labour's adoption of privately financed public hospitals—having the potential to generate the most serious problems of all.

Malcolm Dean

SÃO PAULO **Dengue and hantavirus in Brazil**

The Brazilian Army will be given the task of eradicating *Aedes aegypti* to combat the current dengue outbreaks, according to the new Health Minister, José Serra. Up to 2000 army soldiers will be trained by health authorities to be house-to-house health inspectors. In announcing this latest measure, Serra criticised the lack of partnership between federal and local authorities to contain the disease.

By the end of April, Brazil had officially registered 161 964 cases of dengue. The epidemic has hit the more developed south-east region of the country especially hard,

where three states (Rio de Janeiro, Minas Gerais, and Espírito Santo) account for 106 684 cases. Of the total number of registered cases in the country, 62 are of the more severe form, dengue haemorrhagic fever (30% in Rio de Janeiro).

The rise in the number of cases occurred mainly between 1994 and 1996. In this period, officially registered cases jumped from 50 000 to 166 211. However, since last year, the disease has attracted much attention because several top politicians have contracted the disease, including a former president.

The state of São Paulo, which has

had 2155 cases of dengue, is also being hit by hantavirus infections. The Adolfo Lutz Institute, a state laboratory, confirmed on April 21 the second death—and the eighth case in Brazil since 1993—from hantavirus this year. The victim was a 28-year-old farm worker who lived in Tupi Paulista, about 650 km from São Paulo city. The first death occurred in March, in the same city. Although a study of rodents from Tupi Paulista is not finished, authorities do not believe that an outbreak is imminent.

Claudio Csillag

British Biotech sacks research director amid major allegations

On April 27, beleaguered UK pharma company British Biotech (BB) reiterated its position that claims made by sacked director of research Andrew Millar "had no substance or reflected purely personal opinions". BB faces allegations that it failed to admit quickly enough concerns over results from drug trials including regulatory objections from the European Medicines Evaluation Agency (EMA).

Millar, who was sacked on April 20, had been responsible for the company's clinical research department. As part of his duties, he was in charge of the clinical trials involving BB's two main hopes for success: the anticancer agent, marimastat, and the treatment for acute pancreatitis, lexipafant. Millar was suspended on full pay on March 12, "pending an investigation of breaches of company policy". He is alleged to have disclosed confidential company information to two of its largest shareholders,

Perpetual Investment Management and Mercury Asset Management.

According to the UK newspaper, *The Times*, EMA raised substantial objections to approval of lexipafant, including insufficient evidence of efficacy. These concerns were not disclosed, and the company continued to suggest that it was hopeful of approval for 9 months. It has also been alleged that BB chief executive Keith McCullagh knew of serious side-effects of batimastat, the forerunner of marimastat, when he sold large numbers of shares in 1995, before suspension of clinical trials.

BB has had a rollercoaster ride over the past few years. Its shares have climbed rapidly since 1995, fuelled by optimistic forecasts for its candidate drugs, reaching a peak of more than £3 (US\$5) in May, 1997. However, shares were hit last August by news that the US Securities and Exchange Commission was investigating whether the company had

breached US securities law by its optimistic press releases relating to its drugs undergoing clinical trials. After the announcement of Millar's suspension, £100 million was wiped off the market value of the company and a further £16 million was wiped off when he was sacked; shares have fallen to about £0.5.

The company is still optimistic about the clinical trials of its products, but the sacking is just the latest in a long line of set-backs, including the delay in registering lexipafant with EMA and very disappointing results for the third quarter of 1997 when the company posted a pretax loss of £30.8 million. Some analysts still believe that marimastat could eventually earn the company £900 million a year, but there are concerns that side-effects might limit earning potential or even prevent its launch.

David Jack

Tiger economies' collapse affects students

The economic woes in the Far East may have serious consequences for foreign medical schools that traditionally educate Asian students. Students from countries whose economies have collapsed are likely to find government funding unavailable or difficult to obtain. Such financial difficulties could cut enrolments and income to medical schools.

Malaysia is the first country to state that there will be no new money for medical students to study abroad, a move that could be costly to western medical schools, especially the Royal College of Surgeons in Ireland (RCSI), one of Europe's biggest educators of non-European medical students. The

The Asian depression is also causing much concern at universities in the UK, where some institutions have decided to use their own resources to help students complete their degrees. It is estimated that Asian students contribute up to £300 million (US\$500 million) a year to universities. Financial projections indicate that the collapse of Asian economies could mean universities are facing losses of £180 million. The strength of sterling may also be a factor in future losses to UK universities because students may look to countries where their money will go further.

Irish schools have a long-standing policy of recruiting foreign students because the higher fees help pay for updated facilities and equipment.

According to the *Irish Medical Times*, the Malaysian withdrawal of funds for new medical students may not yet affect the hundreds of Malaysian students currently studying in Ireland. It quotes the Malaysian embassy in London, UK, as saying: "Because of the economic crisis which has seen our currency devalued by 60%, no new students will be attending any overseas medical schools this year."

The embassy also stated that, at this stage, there were no plans for the ban to affect several hundred students now studying at RCSI, and hoped that when the economy improved the situation would return to normal for overseas students.

According to RCSI, it has been involved in discussions with Malaysian authorities over the past few months and was aware that such a decision was "on the cards" but not aware that the Malaysian government had made a final decision.

Karen Birchard

Canadian government survives HCV vote

Canada's governing Liberals have survived a parliamentary vote of confidence while ending the possibility of compensation for all individuals infected with hepatitis C through tainted blood. But only Prime Minister Jean Chretien's threat to expel Liberals who did not toe the party line persuaded disgruntled backbenchers to help defeat an Opposition motion that called for no-fault compensation to all victims, as had been urged by Justice Horace Krever's commission of inquiry (see *Lancet* 1997; 350: 1688).

No Liberals crossed the line as the government defeated the motion 154-140 on April 28 while hepatitis C victims openly sobbed in the public galleries and the Opposition chanted "shame, shame". With the Liberals under siege from their own backbenches and the Opposition ranks, Chretien and Health Minister Allan Rock steadfastly maintained that compensation would threaten the nation's health system by making the government liable for risks common to all medical procedures.

Chretien declared the April 28 vote a matter of confidence. He vowed to let the government fall, and an election be called, had the vote been lost.

Wayne Kondro

US anti-abortion groups found liable under racketeering law

On April 20, a jury in Chicago, IL, USA, found three leaders of two anti-abortion groups liable for trying to put two abortion clinics out of business. The case used a federal law intended to prosecute organised crime rings.

In finding that the two groups had used threats and acts of intimidation to try to close down the clinics, this represents the first time that that particular law, the Racketeer Influenced and Corrupt Organizations Act, known as RICO, has been successfully used in a class action against abortion opponents,

and potentially opens the doors to lawsuits by other abortion clinics against those who seek their closure through means other than mere persuasion or actual violence.

The case, which involved clinics in Delaware and Wisconsin, was actually filed 12 years ago by the National Organization for Women. Even before it could be tried, the case had to go all the way to the Supreme Court, which in 1994 ruled that the RICO law could be used to prosecute those who were not necessarily acting for their own economic gain.

Defenders of the protesters said the verdict represents a threat to free speech, and raises the spectre of using the RICO law to prosecute others who are merely seeking to voice their opinions. But defenders of the clinics said the jury correctly found that the groups, the Pro-Life Action League and Operation Rescue, through such tactics as blockades and other threats of intimidation, were acting in what one called "an organised campaign of terror".

Julie Rovner

Council of Europe urges states to take action against child abuse

The parliamentary assembly of the Council of Europe has urged its 40 member states to increase their fight against all child abuse, by strengthening regulations and developing international cooperation, especially against paedophilia, child prostitution, and pornography. A European paedophile register should also be created, to help track repeat offenders who, after having been jailed in one country, could commit similar crimes in an other state. The recommendation, which was adopted in Strasbourg on April 23, also emphasised that doctors need better training to prevent and detect abuse, especially within families.

Rapporteur Nicolas About, member of the French parliament and a general practitioner, made numerous recommendations that required clinical compliance. For example, he reminded member states that discriminatory practices affecting young

girls, such as genital sexual mutilations practised in the name of "cultural traditions" are to be regarded as torture and inhuman treatment. People coming from countries where these practices exist to live in Europe must be informed that such mutilations are strictly prohibited and severely punished in all Council of Europe member states, he said.

Legislation should enable doctors to overcome the wishes of parents who refuse vital medical care for their children on religious grounds, he added. Sterilisation of physical or mentally handicapped minors, whose reproduction could endanger their own

health or the health of their descendants, should be limited to exceptional cases. Such decisions should be made only by a judge assisted by at least three doctors, including at least one independent medical expert. In other cases, reversible methods of contraception should be encouraged as often as possible.

Other points of the recommendation concerned stronger legislation against incest, non-traumatising criminal proceedings for children taking actions against sexual offences, and measures against networks trafficking babies for adoption.

Denis Durand de Bousingen



Putting children first

Sally and Richard Greenhill

Amnesty International highlights children's rights in south Asia

Children in south Asia, comprising nearly a quarter of the world's children, are voiceless victims of widespread abuse of human rights—such as arbitrary detention, cruel punishments, torture, killings and "disappearances"—both by state agencies and armed opposition groups alike, according to Amnesty International.

To coincide with its special campaign on children's rights, Amnesty has released a report *Children in South Asia: Securing Their Rights* on April 22. South Asia employs half of the world's child labourers, and many of these children work in highly

hazardous industries, often in slave-like conditions.

Increasingly, thousands of very young girls are being trafficked across south Asian borders because of preferences for virgins and the fear of HIV. Armed conflicts and internal strife have devastated the lives of millions of children—leaving them psychologically scarred.

"Physical ill-treatment and abuse can be more damaging for children than adults", says Rory Mungoven, programme director of the Asia-Pacific region of Amnesty in London, UK. "Torture, rape, and sexual abuse—widespread in South Asia—

can distort children's development and traumatise them for life, making it sometimes impossible to fully heal them and reintegrate them into society", he adds.

Through its medical network and the new campaign, Amnesty now intends to forge stronger links with mainstream medical organisations in south Asia, says Mungoven, so that doctors' organisations could become more sensitised and active in the promotion of human rights and in educating members on their responsibilities in this area.

Sanjay Kumar

Perinatal mortality a human-rights issue in India

Callous insensitivity and the abysmal failure of certain critical health programmes for women and children have now forced these issues into the lap of the Indian National Human Rights Commission (NHRC). The NHRC has now formed a core group to address infant and maternal mortality, female feticide and infanticide, and poor health care for women and children.

The national average infant mortality is 77 per 1000 live births—50% of these deaths are due to low birth weight (LBW). Some 40% of all babies born in India have LBW; maternal anaemia and malnutrition are key culprits. 47% of pregnant women have moderate-to-severe anaemia, and almost half of these are thought to give birth to LBW babies. The government launched a National Nutritional Anaemia Prophylaxis Programme (NNAPP) in 1970 which has still not been properly implemented. The NHRC's attention was drawn to this by N Kochupillai, head of endocrinology and metabolism at

the All India Institute of Medical Sciences, Delhi. "A LBW child has an eight-to-ten-fold greater chance of facing compromised physical and mental development resulting in deficits such as physical and emotional disabilities, mental retardation, poor social skills, attention deficits, and susceptibility to infections", notes Kochupillai. For every child that dies, there are several more who are disabled because of LBW, which affects millions of the poor, he says.

Proper implementation of the NNAPP could alter this state of affairs. "Neglecting such programmes, which could prevent the wide prevalence of maternal anaemia, is essentially a serious breach of national responsibility", says Kochupillai, "cutting the very roots of basic human rights to life, and to have good physical and mental health." The NHRC is now identifying geographical areas in particular need and organisational partners to initiate action.

Sanjay Kumar

FDA backs heart laser for angina

On April 24, US Food and Drug Administration advisers voted unanimously for approval of PLC Medical Systems' laser transmyocardial-revascularisation (TMR) system, but with stringent conditions on use.

The panel said that TMR should be limited to patients with stable class 3-4 angina secondary to atherosclerosis, and not used concurrently with other revascularisation procedures. The panel, which had rejected PLC's data in July, 1997, remained concerned about safety, given the small number of patients studied, but most panellists agreed that PLC had done well with its 191-patient trial, despite incomplete perfusion data.

Two-thirds of TMR patients had at least a two-class reduction in angina, compared with controls who received medical management, and TMR did not increase mortality, except when angina occurred within 2 weeks of surgery. Ventricular arrhythmias occurred in 10% of TMR patients but in no controls.

Alicia Ault

From mustard gas to biowarfare—congress tackles military medicine

Biological weapons are 600-times cheaper than chemical weapons and can be easier to manufacture. At the 32nd Congress of the International Committee on Military Medicine (ICMM) held in Vienna, Austria, last week, nightmare scenarios of biological warfare were postulated.

Organiser Col Harald Harbich of the Austrian army told *The Lancet*: "We know the terrorists responsible for the sarin gas attacks in Tokyo were developing biological weapons." Harbich went on to describe the possibility of plague caused by bacteria that have been genetically engineered to alter early symptoms to confound diagnosis. And Robert Harvey, commander of the US Army Launch Tool Medical Center, suggested that "right now, taking care of biological weapons from any government's standpoint is in the 'too hard to do box'".



Limiting harm in wartime

The ICMM was founded immediately after World War I, and many of the problems occupying those in the lecture halls initially arose from that start of industrialised warfare. The incidence of the traumatic stress disorders, once diagnosed as shell shock or cowardice, was discussed in many situations—from bomb disposal teams in Croatia to service personnel deprived of sex and family life in Iran. Alongside papers on combating nerve-gas attacks were lectures on the detection and treatment of injuries from mustard gas, first used in 1917. Other papers noted military problems that were similar to civilian health issues, including drug abuse, coronary disease, and AIDS.

Shooting people remains the most popular military tactic. Speaking of the changes in shooting injuries since 1914, Colonel David Lamb of NATO described only a difference in degree. "We have weapons that cause

different types of wounding: a tumbling AK74 round causes a different kind of injury to a World War I 7.92 mL." Paramedic Bernard Grau of the Israeli infantry observed that if the military have money to spare, "they buy new types of bullets rather than improved bandages. A bandage from 1940 is the same today, and if you need pressure points you have to put rocks in it". He described a new bandage design, which has just completed UK trials, that combines primary and secondary sterile dressings with optional pressure points and tourniquet, and easier fastenings.

Part of the congress was devoted to the health needs of civilians, who are increasingly caught up in conflicts. Petar Gotovac from the Croatian Ministry of Defence outlined the deleterious impact of the 1991 invasion of Croatia on the country's public-health system. And a paper from Israel detailed the in-flight medical care of 14 400 Ethiopian Jews airlifted to Israel in a 36-hour period through necessity, without regard to their initial medical condition.

Nigel Glass