

AIDS at Christmas time

The end of 2005 was supposed to mark the achievement of a critical goal in the treatment of HIV in poor countries. The goal hasn't been met, but it is now within sight.

Two years ago, the United Nations and the World Health Organization (WHO) launched the 3 By 5 Initiative for the global treatment of HIV, with the aim of providing 3 million people in developing countries with antiretroviral drugs by the end of 2005. This ambitious target will not quite be met, with the number falling short by at least a million. But there has been a great advance on the 400,000 who were receiving treatment at the end of 2003. That momentum must be sustained into the new year.

Continued progress will depend on strong political leadership in the countries hardest hit by AIDS, as well as on cash support from outside. The issue of drug pricing has become less acute, as mechanisms have been established to supply HIV treatments at a reasonable cost. But more than 4 million additional patients need the drugs now and tens of millions more will eventually require them.

The initiative set specific national targets, and these have already been met in some middle-income countries; poorer countries are having more trouble, on account of the chronic weakness of their public-health systems. But even here there are grounds for hope. Malawi, for example, has increased the number of its people who are receiving antiretroviral treatment from just 4,000 in 2003 to about 36,000. With more cash support, its programmes can expand to reach the estimated 100,000 other Malawians who still need antiretroviral therapy.

Elsewhere, leaders have overcome cultural barriers and the stigma of AIDS: the prime minister of Lesotho, for example, was tested for HIV in public. And since Brazil initiated free treatment in 1996, deaths from AIDS-related hospitalizations have declined by four-fifths. Yet in too many regions of the world, drug availability remains chronically inadequate. Against the successes of nations such as Malawi and Brazil must be set the failures of others, including three countries with some of the biggest AIDS crises of all: South Africa, Nigeria and India.

South Africa is one of the wealthiest countries on the African continent, but less than a fifth of the nearly 700,000 people who need drugs are receiving them. Manto Tshabalala-Msimang, the country's

health minister, meanwhile continues to emphasize herbal remedies, most recently in a speech in Durban on 1 December.

In Nigeria, an inept and corrupt bureaucracy has severely impeded the roll-out of treatment, which remains out of reach for the overwhelming bulk of the estimated 500,000 people who need it. The government has failed to substantially boost health spending, despite recent windfall revenues from oil exports.

And in India, which may be on the brink of an explosive HIV epidemic, access to treatment has been slow to improve and government officials have been reluctant to face up to the likely extent of the problem. Prime Minister Manmohan Singh has at least shown some leadership in this regard, calling earlier this month for people to shed traditional inhibitions about discussing sex and to address the threat head on.

"Effective HIV treatment can be widely introduced and administered, even in the poorest countries."

Next spring, the WHO will set revised targets for access to the medicines, as it moves towards its existing goal of 'universal access' to appropriate therapies by 2010 — a goal endorsed by world leaders last July at the G8 meeting at Gleneagles in Scotland. But for that to happen, the world's richest nations need to provide money, particularly for the Global Fund to Fight AIDS, Tuberculosis and Malaria, which has so far raised only \$3.7 billion of the \$7 billion that it would like to spend by 2007. Major corporations should also contribute directly to the Global Fund — an approach endorsed recently by the Global Business Coalition on HIV/AIDS, whose members include British American Tobacco and Anglo American.

Only a few years ago, antiretrovirals cost thousands of dollars per patient and widespread doubts persisted about their efficacy in places that lacked a good public-health infrastructure. The goal of universal access seemed wildly remote. This Christmas, it seems much closer. Effective HIV treatment can be widely introduced and administered, even in the poorest countries. The world must move forward rapidly towards universal access. ■

A poor assessment

Given Japan's strong scientific record, the country has a badly flawed research evaluation system.

In the next few weeks, the government of Japan will announce its budget for the fiscal year starting in April 2006. The slow economy and tight overall budget situation may finally have caught up with research, and this year, for the first time in fifteen years, science spending could be cut.

Economies and budgets wax and wane, and scientists cannot expect increased funds as a birthright. But they do have a right to expect fair and transparent evaluation as a guide to good budget management. Japan's national system is letting them down. For decades after the Second World War, spending on science was distributed evenly among about a hundred national universities. But since the mid-1990s, Japan has taken a more selective approach, as befits one of the world's leading scientific powers.

The Council for Science and Technology Policy was established in 2001 to advise the prime minister. Its 15-member council, chaired by the prime minister and including five other ministers of state,

industry representatives and a few scientists, carries out an annual evaluation of every science project funded by government agencies. It uses subcommittees to prioritize according to four grades — S (for superior), A, B and C — on the basis of scientific innovation, international competitiveness and degree of social contribution.

Increasingly, and this year in particular by all accounts, the system bears little resemblance to an objective, independent assessment. This can be a serious problem for major initiatives involving numerous laboratories and hundreds of millions of yen. One problem is a quota system for grades that can be arbitrary and unfair. Such grade quotas need not be a problem if they are applied on a sliding scale that takes into account objective, well-based judgements of achievement across disciplines. But that is not what happens. Too often, judgements, often based on a single day's visit to a project's group leader, don't do more than scratch the surface of a project's significance.

Another problem is that the committee is entirely Japanese. There is of course a limit to how much international experts can be involved. But an international perspective would seem obligatory, particularly when assessing large projects, some of which depend on international collaboration and represent a world-class effort costing many billions of yen.

But the worst failing of the system is a progressive distortion of supposedly objective assessment by the priorities and preferences of

the committee and government. After discussions in closed rooms, ratings emerge that in many cases bear no relationship to scientific achievement or potential, and seem to defy explanation. A major project may be graded 'S' for two years in a row and then be graded A despite maintaining its performance. Even worse, some cutting-edge projects, after many years of top-level grades, have this year been graded 'C' for no conceivable scientific reason.

Some might argue that scientific spending, like other funding, must follow government priorities and so be subject to abrupt changes. No one would suggest that national priorities should remain fixed. But for the process to be nationally and internationally credible, and for top-notch scientists to believe that Japan is a good place to spend their best years, the system of evaluation must be revised. Many researchers see it as opaque and apparently arbitrary. Japan may not be unique — other leading countries also lack a clear evaluation process — but this does not make it acceptable.

Scientific assessment should be objective, well considered and transparent to those being assessed. It should be kept distinct from the process of priority setting, which should itself be open, and should involve greater participation of researchers before final decisions are reached. ■

“Scientific assessment should be objective, well considered and transparent to those being assessed.”

A recipe for trouble

A prestigious research agency should have thought twice before attaching its name to a diet book.

Going on a diet is a popular new year's resolution. This year, a diet book penned by researchers in Australia is set to turn up in many Christmas stockings. But its runaway success could damage the reputation of Australia's foremost research institution (see page 1060).

The diet book in question is by no means ground-breaking. Its high-protein message is not that different from others that have drifted into fashion in the past few years. But this one bears the badge of Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO).

In some parts of the world, it might seem odd that splashing the name of a scientific institution on the cover would shift copies of a book to the public. But CSIRO — which runs Australia's main network of government laboratories — has an unusually good public reputation. It is widely perceived as a trusted national institution. Its history, including its pivotal role in the development of agriculture and mining in Australia, has left a strong impression that it knows how to put science to good use.

But the commercial success of the book, which knocked Harry Potter and *The Da Vinci Code* off the national bestseller perch, is irritating some scientists, and for good reason.

The benefits of a high-protein diet remain a hot topic of debate among nutritionists. But even some of those who approve of such a diet question whether it should rely as heavily on meat as this one

does, given the health risks associated with high meat consumption.

But what really rankles with the book's critics is the way it is being marketed. There's something decidedly unsavoury about using the phrase “scientifically proven” to sell anything to a trusting public, yet this is writ large on the book's front cover. The diet is also being promoted as being beneficial for everyone, whereas the published research indicates that it is superior to a high-carbohydrate diet only for a subpopulation of overweight women with symptoms of metabolic dysfunction.

Furthermore, the research behind the book was largely funded by the meat and dairy industries, whose products feature prominently in the diet. Detractors say that this aspect should have been more explicitly recognized, instead of being buried in the book's acknowledgements. The authors insist that the sponsors had no influence on the book's content, but the impression remains of a conflict of interest.

“There's something decidedly unsavoury about using the phrase 'scientifically proven' to sell anything to the public, yet this is writ large on the book's front cover.”

To be fair, the book was not the idea of the researchers or even CSIRO's management. It came from a wily commercial publisher who spotted an opportunity. CSIRO, which has its own publishing arm, only reaps a small percentage of the profits in the form of royalties to its nutritional-research division.

Defenders of the book will argue that its success illustrates how to translate research into an accessible and popular format that puts science into practice. But that argument doesn't justify CSIRO giving permission for its name to be used in a way that could ultimately taint its hard-earned reputation. ■