Commentary: reserve acyclovir for secondary cases

Acyclovir is a safe drug that reduces the duration and severity of childhood chickenpox when started within 24 hours of the rash appearing. The case for using the drug in children who are immunocompromised (including those receiving steroids) is unanswerable. But I am not convinced that the drug should be used routinely in all children with chickenpox. The cost would be substantial and out of proportion to the benign course of most cases of the disease. Both authors make the point that secondary cases within a family are more severe and easier to identify earlier than the primary case. In an era of limited health care resources it seems more appropriate to reserve acyclovir for these secondary cases.—PETER C RUBIN, *professor of therapeutics, University of Nottingham*

chickenpox.⁹ Since acyclovir given orally is virtually devoid of side effects, why not treat chickenpox with acyclovir now?

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The World Health Organisation

WHO fellowships—what do they achieve?

Fiona Godlee

This is the fifth in a series examining the role of the World Health Organisation, its current problems, and its future prospects

Training health professionals is one of WHO's major strategies for improving health care in the developing world. The aim, to strengthen a country's own capacity rather than injecting expertise from outside, is in the best tradition of sustainable development. But how effective is this so called "capacity building in human resources"? Since it accounted for \$43m of WHO's budget in 1992-3 and is considered by WHO to be a major contribution to health in individual countries, it deserves detailed examination.

WHO funded over 4500 fellowships in 1992-3, to which it allocated about 5% of its core budget. The fellowships allow health professionals to visit teaching institutions, largely in the developed world, for periods of up to a year. They are administered by the regional offices but paid for almost entirely out of individual countries' budgets, the idea being that each country will know what expertise it needs and will be best placed to select the right people to train to fill the gaps. In theory the training fits fellows for a specific assignment when they return home, in line with the country's and WHO's strategic plan. Also in theory candidates are selected according to set WHO criteria by a specially formulated selection committee, which includes a representative from WHO.

Major shortcomings

In practice, however, as several reports have made clear, the fellowship programmes in many areas are badly administered and often unevaluated.

In a report to the executive board in January 1991 the director general highlighted major shortcomings in the fellowships programmes in some regions. Member states were requesting fellowships for training in highly specialised areas of medicine rather than primary health care, and many countries, especially in Africa, had no selection committees and no clear selection criteria. Three years later WHO's external auditor, Sir John Bourne, found little improvement. In a highly critical report presented to the World Health Assembly in May he concluded that, because most countries in the highest spending regions—South East

Asia and Africa—had no clear idea of their training needs, it was impossible to assess whether fellowships were being properly targeted.¹ Study objectives were, he said, stated in the vaguest terms and referred to activities (for example, "to carry out a two week visit to the Leprosy Control Programme in Thailand and Malaysia") rather than objectives. There was, he said, "virtually no evidence to show that the ministries of health had obtained the support of the WHO representative; that the WHO representative had appraised the application against national or WHO policy objectives; or that the candidate was an appropriate choice for WHO support."

The South East Asian regional office spends nearly a fifth of its budget on fellowships, but none of the 10 countries in the region that were studied by the external auditor explicitly assessed whether a fellowship was the most suitable form of training to meet the applicant's objectives. Nor did they formally assess whether a fellowship would help towards achieving Health for All objectives. Three of the countries in South East Asia had no formal selection procedure, and of the seven who did, five did not involve WHO in the process. A quarter of the fellowships studied were awarded to people aged over 50 (three of them to people over 55), which, as the external auditor noted, "limits the time in which the benefits obtained from the fellowship may be applied."

The situation in Africa was no better. Over half of the fellows studied failed to meet one or more of WHO's criteria: two applicants were not engaged in medical or health work in their national health organisation, and seven did not have the requisite practical experience. Five of the 45 fellows reviewed by the external auditor had been awarded places at training centres before they applied for funds from WHO, and the audit found no evidence that the regional office had assessed whether the course was the most suitable option for WHO. The external auditor also noted that some people received more than one fellowship, one person having received five fellowships in the space of seven years. One of the main criteria used for selecting fellows was length of service in the national health administration. By 1992, only 15 of Africa's 46 member countries had established national policies for

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Now that even poor countries like Nepal have high levels of local medical expertise, their real need is for improved health management and training

developing health staffing, and the regional office in Brazzaville was unable to provide the external auditor with any documents relating to health staffing policy.

Follow up in both regions was poor, said the report. The scheme for evaluating fellowships from reports written by fellows at the end of their training had "fallen into abeyance" in South East Asia. In Africa last year only 14% of fellows filed reports and half of those studied were given no specific assignment when they completed their fellowships. All fellows from South East Asia were expected to return to their old post with no consideration of how their new skills might be used.

Politics instead of policy

From this report one thing is clear. Like its country level activities described in the previous article, WHO's regional fellowships programmes have no strategy. As so often in WHO, politics rather than policies dictate what happens. Observers say that since WHO has no mechanism for assessing countries' needs and makes no attempt to be proactive in developing local expertise, fellowships are not awarded as part of an overall scheme but in an ad hoc fashion, largely on the basis of which country's turn it is next. With countries (and institutions) exerting political pressure at regional level, WHO itself has little say in how the fellowships are allocated in terms of the specialties, individuals, or institutions. Its division of human resources in health in Geneva, which coordinates the regional fellowships programmes, acts largely as a passive recipient of reports from the regions.

Discredited model

Even if there were no political pressures distorting the allocation of fellowships, the \$20m a year that WHO spends on fellowships would be largely wasted, say critics, because WHO's approach is fundamentally flawed. "Given the harsh working conditions for many health professionals in the developing world," said Dr Bob Lawrence, director of health sciences at the Rockefeller Foundation in New York, "training a few isolated individuals without providing continuing financial and moral support when they get home is unlikely to have much impact."

WHO's approach to capacity building has been discarded by other organisations, among them the Rockefeller Foundation, one of the leading independent supporters of capacity building programmes. Dr Lawrence maintains that, as well as having little impact, WHO's approach has other problems: training people in the West has, he says, contributed to a serious brain drain, especially in sub-Saharan Africa;

the training itself is often didactic rather than practical, as well as being irrelevant to health problems in the developing world; and it is increasingly expensive, which limits the number of fellowships available. (According to the European regional office, training in the West costs \$50 000-60 000 a year—money which is allocated to countries' budgets from membership fees but is actually spent in the developed world.)

Other models

WHO's approach compares poorly with other capacity building programmes. The most widely commended scheme has been pioneered by Incen, the international clinical epidemiology network. With a budget of only \$5m, largely from the Rockefeller Foundation, Incen has identified about 250 midcareer professionals, selected from 27 institutions in Africa, Asia, and Latin America, and has funded their training in Western institutions. When these individuals return home Incen provides them with continuing financial and moral support to set up clinical epidemiology units within their medical schools. Incen's objectives are clear: to establish within strategically placed institutions a critical mass of expertise, consisting of a biostatistician, an economist, a social scientist, and five clinical epidemiologists, by whom future generations of health researchers will be trained. Important features of the programme are Incen's active involvement in selecting the institutions and the individuals, with site visits and interviews; the continuing mentoring and financial support, with an annual meeting of fellows and mentors and regular communication through the internet; and the scope for mutual support and collaboration between Incen fellows in the same institution, helped by Incen's insistence that they be provided with contiguous offices. The programme is now entering its second phase as the units take on their own trainees.

Another model, pioneered in agricultural research, concentrates on scientists already advanced in their careers. It posts them to an established institution in the developed world for three months every year for three years, where they receive guidance and further training. For the other nine months of each year they work in their home country, with funding and protected time for research. As with Incen, the aim is to encourage long term collaboration and support. The Rockefeller Foundation has adopted this model for training health researchers. "The model represents an important move away from 'safari research'," said Dr Lawrence, "where scientists from developed countries drop in and use local scientists as data gatherers and not as real coinvestigators."

Training in special programmes

Some programmes in WHO—those that are independent of the central management by virtue of their extrabudgetary funding—have recognised the need for a change in their approach to capacity building. Most notably successful has been the programme for tropical disease research. It has concentrated on eight major tropical diseases and has allocated a quarter of its budget (\$75m since 1975) to strengthening research capabilities. Half of the money goes to supporting institutions, the other half to training individual researchers. Dr Robert Walgate, the programme's communications officer, believes that its great strength lies in establishing paired collaborations between institutions in the developed and developing world.

Though WHO's unstructured regional fellowships scheme shows improvement, the tropical diseases research programme's scheme has so far failed to establish a long term educational strategy, according

to a recent internal report. Commissioned by the programme as part of its commitment to evaluation, the report concludes that the programme has no coherent plan and lacks clear objectives against which to evaluate its outcomes. Its author, Professor Stuart MacLeod, McMaster University in Canada, interviewed 41 visiting students and faculty members at the schools of tropical medicine in London and Liverpool. They all commended the training for its relevance to research in the developing world. Professor MacLeod was surprised, however, by their lack of understanding of the aims of the programme and the fact that few of them planned to do any teaching when they returned home. "Part of a capacity building programme has to be building up centres of education in disease endemic countries," he told me. "You need somebody in Uganda, somebody in Tanzania, who can train other people. Most of these students were returning to government labs with no educational affiliation and without adequate financial support to allow them to make use of their new skills."

Like many parts of WHO, the programme suffers from lack of funds. The \$7m allocated in 1992-3 was "a drop in the ocean," said Professor MacLeod. This has to be divided between over 100 countries with endemic disease, most of which are among the poorest in the world. "It is hard to imagine what impact such a scheme could have across the developing world," he said.

Dr Walgate acknowledges the criticisms. In response, the programme is starting to fund re-entry grants for returning trainees. It is also working to reduce costs and increase relevance by shifting trainees from Western institutions to institutions in the more advanced developing countries like Thailand and Brazil.

Whose priorities?

WHO's independent programmes are in an enviable position. Because they are not answerable to the organisation's central management, they escape the overwhelming political considerations that are so much a part of fellowship allocation in the regions. They can set their own priorities. The tropical diseases research programme does not worry that this might be seen as undemocratic. "We are concentrating on what we consider to be the most serious tropical diseases," said Dr Walgate. "Individual countries may have other

Fellowships awarded by WHO, 1992-3

Region	Number of awards	Cost of awards	% Of country level spending
Africa	360	\$8.2m	10.8
Americas	385	\$4m	11.8
Eastern Mediter- anean	1113	\$5.6m	11.2
Europe	185	\$0.2m	9.1
South East Asia	1643	\$15.7m	23.1
Western Pacific	886	\$9.3m	24.9
Total	4572	\$43m	

Source: WHO; some figures were not available at time of going to press. These figures relate to spending from the regular budget. In addition, WHO spends \$6.6m from extrabudgetary funds

priorities. If so, they can express these through the regional fellowships scheme."

Individual countries clearly do have their own priorities. At the moment, however, these are not in line with WHO's stated priority of developing integrated primary care. As the external auditor, Sir John Bourne, noted in his most recent report,¹ countries continue to apply for fellowships in specialised areas of clinical training. He also noted that WHO continues to support such applications. WHO passively perpetuates the bias in developing countries towards high tech medicine, despite the findings of an earlier report from the Danish aid organisation, Danida.² This concluded that even poor countries like Nepal now had high levels of local medical expertise and that their real need was for improved health management and training.

Conclusion

WHO's fellowships programmes would be the ideal vehicle for changing this bias by setting clear objectives for training in these much needed disciplines. And given their extra freedom, the independent programmes could be far more proactive in identifying countries' needs and selecting appropriate institutions and individuals for support.

WHO is aware of the shortcomings of its fellowships programme and is planning a review in three years' time. WHO's budget for 1994-5 states that training of regionally funded fellows will increasingly take place within developing countries. But there is no sign that the central management fully recognises the need for a strategy to build up national and regional centres for training, or to shift towards training in health management and planning. In the light of this, commentators remain gloomy about the prospects for change. They say that WHO's central management has become increasingly defensive over what it considers to be encroachments by others onto its personal territory of training in health care and research. They believe that WHO is entrenched in a situation where political rather than meritocratic and strategic considerations will continue to control who gets trained and where. If they are right the funding of fellowships will remain an expensive and incoherent gesture, acting largely as a route by which donated money finds its way back to the industrialised world.

¹ World Health Organisation. *Financial report and audited financial statements for the financial period 1 January 1992-31 December 1993 and report of the external auditor to the World Health Assembly. 47th World Health Assembly. Geneva: WHO, 1994.*

² Danida. *Effectiveness of multilateral agencies at country level: WHO in Kenya, Nepal, Sudan, and Thailand. Copenhagen: Ministry of Foreign Affairs, 1991.*

ADRIAN STEVENS

People still come to prestigious centres at great cost