

Progress in the right direction

by Isao Arita

Whilst I was travelling in western and eastern Africa during the smallpox eradication campaign in the 1970s, I often encountered a patient with a malignant tumour of the jaw in the hospitals which I visited. Later I realised that this was Burkitt's lymphoma, a monoclonal tumour of B cells. Denis Burkitt had travelled extensively in tropical Africa in the early 1950s and had established the entity of this special disease.

I have no intention of telling the whole story of Burkitt's tumour here, but it came to mind because I was once very much impressed by his brief essay entitled "Great progress but in wrong direction" which *Lancet* published in December 1984.

In it he wrote: "Newspapers and television have reported the insertion of a non-human primate's heart into a baby and the implantation of a plastic heart into an adult man as if these were landmarks in medical progress. But are they?"

"All the really major advances in health care have been in the realm of prevention. Probably the greatest health achievement in this century has been the elimination of smallpox. In 1967, there were an estimated 10 to 15 million new cases with an estimated two million deaths; now the disease is non-existent. The cost of this achievement, spread over ten years, was around US \$300 million. This is less than the amount spent every two months in the United States on coronary by-pass surgery or on removing gallbladders—both operations for potentially preventable diseases."

As Denis Burkitt pointed out, there are two principal lessons to be learnt from WHO's Smallpox Eradication Programme (SME). The first

is that prevention is far better than treatment, and the second is that international cooperation is of the utmost importance. These lessons—simple as they are—should be applied to the control of chronic diseases in industrialised countries as well as to the child survival programme in developing countries.

I retired from WHO in 1985 and now manage a national hospital of 550 beds in Japan. When I returned to hospital work, I was astonished by the tremendous progress made

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in clinical medicine during the past two decades with such processes as automatising of diagnostic techniques, imaging diagnostic methods, hyperalimentation, anti-microbe treatment and organ transplants. Yet these treatments, requiring expensive equipment, are being used to manage the diseases of patients whose full recovery could not be expected because they are mostly of advanced age and suffering from all sorts of complications.

In Japan, 600,000 persons die every year, 80 per cent of them from cardiovascular diseases or malignant tumours. As old persons form an ever-increasing proportion of the total population, these conditions will result in a substantial increase in medical costs. Under these circumstances, it is highly significant that primary and secondary preventive measures against these diseases have been developing very rapidly, as Sir Richard Doll noted in an address to a learned London society in October 1982. He sug-

gested that prevention would be the best method of coping with current medical problems and its importance would increase toward the end of this century.

In order to further strengthen its aid programme, Japan's International Cooperation Agency last autumn dispatched a few teams to South-East Asian countries, the United States and Europe to study international health policy, especially on a bilateral basis. I was a member of one of these teams and observed as an outsider (not as a WHO official) the latest trends in international health. I was surprised to see the extensive and vigorous campaign called the Child Survival Programme. This programme is a joint effort of WHO, UNICEF, the World Bank, governments (bilateral assistance from the US and West European countries) and non-government organizations (Rotary International, the Rockefeller Foundation and so forth) to reduce the tragic mortality rate of children in the Third World.

It is heartening to see that, in this global programme, the main emphasis was placed on the Expanded Programme on Immunization and on Diarrhoeal Disease Control. As is quite well known, these two programmes have been initiated, strengthened and encouraged by the success of SME. Many staff members in those programmes were among those who originally worked for the smallpox eradication programme.

Let me cite one episode in relation to this. During my trip to the US I met the staff from WHO's Office of the Americas who were carrying out the poliomyelitis elimination programme in the region. Many senior staff for this programme, both at the WHO Regional

Right: *Quality control of locally produced vaccines in Bangladesh. International cooperation was of the utmost importance in eradicating smallpox.*

Below: *Millions of vaccine doses from the Soviet Union contributed to the final success.*

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Office and at the country level were among those who once worked for SME. It was interesting to note that many important elements, such as programme management, surveillance techniques and vaccine quality control, appeared to be derived from the experience gained from the eradication programme. The target was set, namely that 1990 would be the year when the last indigenous poliomyelitis case might occur in the Americas. Needless to say, Latin America will have to continue the polio vaccination programme after the target is met. This was not the case with SME, where the vaccination programme could be stopped completely. In Latin America, it is important to develop primary health care systems in order to maintain zero incidence once it is achieved.

It is heartening to see that, in the vigorous global campaign known as the Child Survival Programme, the main emphasis was placed on immunization and diarrhoeal disease control—two programmes that have been initiated, strengthened and encouraged by the success of WHO's smallpox eradication campaign. Many staff members in those programmes were among the thousands of helpers who worked for the eradication of smallpox.

The year 1987 marks the tenth anniversary of the occurrence of the world's last endemic case of smallpox. During the last ten years, innumerable problems have arisen in carrying out various health programmes. But the success of the smallpox eradication programme will always give us grounds for optimism, and faith in the view that international public health efforts can and will eventually be crowned with success. ■

