

SPECIAL ARTICLE

The leprosy control programme in the People's Republic of China

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At an International Leprosy Symposium in 1985¹ in the People's Republic of China, China pledged to eradicate its leprosy problem by the year 2000. For any other leprosy-endemic country this statement might be dismissed as a hopeless political dream; but for China, with a declining number of leprosy cases,^{2,3} and a well-structured health system since 1949, this dream is already coming true.

For my final year elective project I decided to take advantage of China's 'Open Policy' to examine how well the eradication programme is working. Dr A C McDougall of the Slade Hospital, Oxford, contacted the Ministry of Health, Beijing, and I was then invited to stay at China's Leprosy Centre (CLC) in Guangdong Province from March to June 1988. The welcome I received surpassed any elective students expectations: I was greeted by the Director, Professor Zheng Ti-Sheng, and applauded during welcoming speeches at a special meeting the next day. I soon learnt that I was the first Western medical student to work in this Centre. I visited the various departments: Rehabilitation, In-patients, Pathology, Microbiology and Epidemiology.

The Rehabilitation Department consists of 6 doctors who performed over 150 reconstructive operations from 1985 to 1987. Unfortunately, the patients on whom they operated while I was there had not used protective gloves, shoes or glasses, and had not had regular physiotherapy before they came to the Centre for repair of their damaged limbs. The Epidemiology Department is the 'power house' of China's Control Programme. Here, on computer, are available the data of all provinces, autonomous regions and municipalities. Incidence and prevalence rates since 1957 are recorded but, alas, there is little data on disability and deformity rates.

I also managed to visit county, township and village hospitals where I soon realized that the most important parts of the leprosy control programme have not changed since the 1950s: the Provincial Centre organizes manpower; the County Centre trains workers; the Township Hospital will see most of the patients monthly at its outpatient clinic or village clinics; and severe cases or socially uprooted patients, stay at the leprosy village.

The effectiveness of China's leprosy programme

China's control methods of repeated case-finding surveys, replacing Missionary hospitals with Government hospitals staffed by Chinese doctors, and financial assistance from the Government for all leprosy patients since 1950, have produced laudable results. Of the accumulated 500,000 leprosy patients from 1957 to 1988, only 14% are now classified as active cases. Since 1957, 10 provinces (one-third) in the North and North-East of China have achieved the goal of 'basic eradication', i.e. a prevalence rate of less than 0.01 per 1,000, and an incidence rate of less than 0.02 per 100,000. The prevalence of leprosy in children under 15 years of age has fallen from 16% of all

leprosy patients in 1957 to 0.06% of all patients in 1986. Virtually all this has been accomplished using dapsone monotherapy.

Despite the remarkable effectiveness of incidence and prevalence control measures, the effectiveness of *continuing care*, including the prevention of deformities among the accumulated half a million patients, provides a marked contrast. While the 50 patients with disabilities that I examined came from leprosy villages or the Centre's clinical department and were mostly of the more severe forms of leprosy, they were also the only patients who could be supervised every day. On average, disability or deformity occurred 6 years after the diagnosis of leprosy and 70% of the disabilities were Grade 3, using the WHO scale.⁴ On direct questioning, only half the patients said they inspected their anaesthetic areas daily, while only a third exercised their nerve-damaged eyes, hands or feet. None of the patients had special shoes, protective gloves or glasses for their anaesthetic and unprotected disabilities, although 10 patients had had reconstructive operations or amputations.

The worrying aspect of the above is that while China's Leprosy Centre and the leprosy service generally have the organizational skills, manpower, and the Government backing to reduce incidence and prevalence of leprosy, they seem to be lacking in the incentive to prevent and treat deformity among 'cured' patients. This is all the more regrettable since the technology to do so is in fact available.^{5,6}

Lessons to be learnt

The disability data in the People's Republic of China, if eventually collected, will show a sad trend. Rehabilitation as a specialty in China began only in the 1980s—decades after America—but, even today, it attracts little enthusiasm as a medical subject among the younger doctors.

The current plan is to build 10 rehabilitation centres; 2 by 1990, which will: 1, research into rehabilitation; 2, retrain 2000 doctors in rehabilitation; and 3, educate patients with Grade 2 disability every 3–6 months. There are, however, grounds for questioning the need for special centres and even the need for doctors in teaching 'self-care'. Workers drawn from leprosy patients themselves, and medical workers like 'community physiotherapists' may be better suited to the job of visiting patients every month (or seeing the patients in clinics), and perhaps organizing a County 'Self-Care' day every 6 months for all patients. Motivation could be enhanced by financial bonuses to workers whose patients' deformities have not worsened during the preceding 6 months.

Perhaps the above is impractical but, either as a result of steady improvement in socioeconomic conditions and/or the application of medical measures (essentially dapsone monotherapy), highly significant reductions in incidence and prevalence have been achieved in the People's Republic of China. It is to be hoped that disability control will make similar progress. The basic organization already exists and in a country with such able and highly motivated people, where so much has been achieved in 'bacillus control', it should be possible to tackle 'disability control' with equal success.

References

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