

# Adherence to TB treatment in Chongqing

## Situational analysis and policy implications<sup>a</sup>

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### Background

1. Effective tuberculosis control is a priority for the Government of China, and the Chongqing Institute of TB Prevention and Treatment has striven to improve care in the Province. As a result of better detection and better service provision, registered TB patients have increased from 9,866 in 2002 to 16,655 in 2004, with a slight fall to 14,029 in 2005.
2. In 2003, the MoH awarded a grant to the Chongqing Institute to investigate direct observation which is a core part of the government's Directly Observed Treatment Short-course (DOTS) strategy.<sup>b</sup> This is an interim report of the findings and their policy implications.

### Situational analysis

3. **Patient adherence could be improved.** Over 10% of patients registered as on treatment were not taking the drugs at the time of the interview (missed the last three doses, or had run out of drugs for more than a week). The level varied between counties (from 6% to 22%). As it is based on patients' reports of their own adherence, it is probably an underestimate. The study estimated at the best run facility 25% of patients defaulted during the first five months of treatment. These data were derived by extracting visits from each individual patient's record. We noted that in routine statistics health workers sometimes class defaulters as people completing treatment. This may make centrally consolidated estimates of completion rates over optimistic.
4. **Direct observation by health workers is uncommon.** More than two thirds of patients interviewed reported that they have never been directly observed taking their treatment; and less than 5% of patients were observed by a health worker. Some patients reported a family member being present when they take the medicine, but not in a monitoring role. Patients reported that they were aware that they are themselves responsible for taking their drugs, and they perceived that it was unnecessary to be observed by health staff. Current MOPH-World Health Organization policy is that patients should take their drugs watched by a health worker.<sup>c</sup>
5. **Village doctors indicated that it was not feasible for them to supervise patients in most cases.** Although doctors can receive incentives through World Bank projects, the extent this happened in practice varied. Few doctors saw the financial incentive as important, perhaps because it is only a total of 60 to 80 Yuan per patient over six months.
6. **Patients report treatment is expensive.** Although TB diagnosis and drugs are provided free by the government, prescribing liver protection drugs is universal. Patient-reported costs per prescription varied between the counties, ranging from 60 to 500 Yuan. This is leading to a series of financial pressures that contribute to the difficulties patients face on top of their illness.

## Implications for policy

7. Carefully conducted research in other counties is required to explore the effectiveness of current information systems, and to estimate accurate completion rates. Such surveys should be independent of the TB providers to help derive accurate estimates.
8. As direct observation seems to be difficult to implement, alternative options need to be discussed and implemented. Targeted approaches tackling defaulting early are probably effective, and worth considering. This is being piloted in Chongqing and the results from this feasibility study will be available at the end of 2006.
9. Any approach to improving adherence probably needs some modification to the current information systems to allow prompt defaulter action to be taken. Facilities currently check defaulters every 2 to 3 months which is late for remedial action.
10. If the public health system is to deliver and monitor tuberculosis treatment, then an assessment of the capacity of the whole delivery system needs to be considered in any future strategic plans; and collaboration with the private sector needs careful implementation and monitoring.

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<sup>b</sup> A field based study was carried out in four selected counties (Chongqing municipality, and three rural). In collaboration with specialists from Fudan University and the Liverpool School of Tropical Medicine, Chongqing TB centre staff conducted a careful survey of 401 patients to estimate completion rate, and a qualitative study of patient and health worker experiences of DOT. Final report available from the authors.

<sup>c</sup> Center for Disease Control. The operational guideline for Tuberculosis control program in China (中国结核病防治规划实施工作指南). Beijing: Ministry of Health 2002; 35-36.