## **Letters**

## How private practitioners help to control TB

Editor – The article by J. Newell (1) rightly emphasizes the need to include private practitioners in the planning and implementation of tuberculosis (TB) control programmes. Nonetheless, some of the assumptions underlying the article are not supported by evidence and may lead to incorrect conclusions.

Firstly, there are limited follow-up data on how many patients remain infectious after correctly conducted TB chemotherapy; a figure of 2.6% is reported for an outcome evaluation five years after treatment in Germany (2), 3% four years after treatment in Denmark (3), 3.6% among non-HIV patients 1.2 years after treatment in South Africa (4).

Secondly, it is an optimistic assumption that 70% of people developing sputum-smear positive TB will be detected through DOTS programmes. The only high-burden country in which this has been achieved is Viet Nam. In most settings, the figure might well be 60% or even lower (5). Three per cent of these patients (the postulated proportion remaining infectious) would represent 1.8% of the entire cohort. This proportion is probably higher, as those not evaluated, transferred and defaulted are more likely to remain infectious.

Thirdly, not all of the remaining 40% of patients die or recover spontaneously. Older studies (of course, today it is not ethically acceptable to leave any patient group without treatment) suggest that 18% (6) or 20% (7) of these 40% (7.6% of the entire cohort) remain infectious after five years. Thus, even under good national TB control programme conditions, we can expect approximately 9% (and not 4% as given by the author) of all sputum-smear positive patients to remain infectious.

On the other hand, private practitioners should be able to detect some 50% of the sputum-smear positive cases. Furthermore, at least 50% of these 50% should be cured after under-

going private sector treatment. The "natural cure rate" without any intervention was identified to be 33% (6) or 30% (7). There is convincing evidence that even very short treatments improve this rate considerably. Relapse rates between 8% and 13% were observed from two to five years after initiating a short-course regimen of only four months duration (8, 9). Thirty months after starting regimens as short as two or three months, relapse rates of 15% and 9% were identified for sputumsmear negative patients (10).

There is a threat — though slight — of an increase in the proportion of infectious patients after private sector treatment when compared to those given no intervention. This threat is enhanced by the increased probability of multidrug-resistant tuberculosis (MDR–TB) among those patients after such treatment.

Conversely, it cannot be ignored that this goes hand in hand with a higher cure rate and a lower mortality rate in the cohort undergoing private sector treatment in comparison to those without intervention. Even under good programme conditions, a considerable proportion of TB patients are dead or infectious five years after treatment. From the individual point of view, such "low quality" private TB control seems to be better than no TB control at all. Thus, this unsystematic approach might have its positive impact. In the end, this reflection underpins the necessity to integrate private practitioners in TB control programmes in order to move from individual cure to public health without minimizing the benefit of individual cure.

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