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Editorial: Engaging the private sector for tuberculosis control: much advocacy on a meagre evidence base

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Advocacy on engaging the private sector in tuberculosis (TB) control is mounting. In the newly launched six-point Stop TB Strategy, WHO makes an urgent appeal to engage private care providers (WHO 2006a). Even more recently, this was supplanted by a guide on how to involve all care providers in TB control through different Public-Private Mix (PPM) approaches (WHO 2006b). At the same time the body of evidence on the effectiveness of such approaches, although growing, remains rather weak: It has been summarized in a review of PPM-DOTS pilot studies in Kenya, Vietnam and India by Lonnroth et al. (2004), a review of PPM pilot studies in India by Dewan et al. (2006), a first economic evaluation of a PPM initiative in India (Floyd et al. 2006) and a review by Lonnroth et al. (2006) focusing on the contractual component of PPM pilot initiatives across the globe.

The earlier review of four PPM-DOTS projects in Vietnam, Kenya and India by Lonnroth et al. (2004) supports the notion that engagement of the private sector may accelerate the achievement of goals for global tuberculosis control. However, a closer look at the data presented reveals a wide variation of effect on case detection with a median of 5.49 (Q1 = 1.19; Q3 = 10.76)new cases notified per private provider per year and a lack of information on the percentage of cases (out of the total notified in the pilot areas) that was detected by these providers. Context specific factors evidently mattered much, and the authors further suggested that to ensure impact the national TB control program (NTP) must be strongly committed. Supporting, supervising and evaluating PPM projects and investing time and effort to ensure sufficient dialogue amongst all stakeholders was essential to help build trust and to achieve agreement on how to collaborate.

The review by Dewan *et al.* (2006) focusing on 14 PPM projects in India also showed a wide variation of effects. The median of new cases notified per private provider (PP) was 0.53 (Q1 = 0.28; Q3 = 0.68) per year. In Mumbai for example, 1214 PPs detected over 30 months 910 new patients, that is 0.3 new cases per PP per year. Surprisingly,

as in the previous review, it was hardly worked out what proportion of TB patients were eventually detected by PPs. Data are available for only six of the reviewed pilot projects, in which cases detected by PPs represented 6–26% (median 15%) of all cases notified in these project areas. This seems to indicate that with a large private sector, this proportion could, in theory, be non-negligible, even at relatively low detection rates per PP. Furthermore, Dewan *et al.* (2006) also highlight that the engagement of PPs was obtained mainly through a 'one-to-one' approach involving individual visits by NTP to each PP. Making PPM work thus clearly required, again, significant resources, time and energy, which raises questions on the opportunity cost and cost-effectiveness of this strategy.

Floyd et al. (2006) evaluated the cost of two PPM initiatives in India and conclude that PPM-DOTS 'can' be cost-effective. However, it remains unclear whether a PPM approach was more cost-effective than increasing case detection through strengthening of existing public sector DOTS services. The study just compared PPM-DOTS implementation with existing public sector DOTS delivery without evaluating the cost and effectiveness of further strengthening public sector facilities. Moreover, the authors caution against policy formulation based on their study by highlighting that: (i) the conclusions apply only if PPM-DOTS is building on an already strong public sector programme; (ii) convincing the private sector to become involved requires the existence of a strong public sector programme that has demonstrated success and (iii) the level of resources supplied free of charge may not be sustainable or generalizable to other sites. Unfortunately, the public health systems in which PPM initiatives are supposed to be implemented are often weak (Singh et al. 2002). Hence, the authors actually reassert that the first priority should be to establish or strengthen the public

Finally, the notion that TB treatment should be free seems to become marginalized in the PPM discourse. The place of TB drugs in PPM was addressed, in a way, by Lonnroth *et al.* (2006) as part of their review of the

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contractual arrangements in 15 PPM-DOTS initiatives (some of which were also included in the reviews we cited above). Apparently nearly all PPM encompassed a drugfor-performance contract with the PPs. This was seen as a crucial factor in the success of the reviewed PPM initiatives. The authors highlighted that the process to establish such an arrangement can be long-winded and once reached requires continuous supervision to be effective. What remains unclear is whether it will always be feasible to assure that the TB drugs remain free for patients treated by the 'contracted' private providers. But even if this were the case, treatment success rates (which are not consistently available) might be poor and well below the 85% target (as was reported in this review for the pilot in Yogyakarta, Indonesia), wherever consultation fees in the private sector constitute a barrier to patient compliance.

In conclusion, the current evidence at best points towards mixed results with PPM-DOTS initiatives at considerable costs and reveals a consensus on strong public health systems taking the lead as a pre-requisite. Surprisingly, the new Stop TB Strategy strongly highlights PPM as a key to successful TB control. Allocative efficiency is an absolute must for the countries with the highest TB burden which generally have very limited resources. Lessons from high burden countries with large private sectors, such as Vietnam and Peru, demonstrate that effective TB control is possible in such an environment without pursuing substantial involvement of the private sector (Suarez et al. 2001; Huong et al. 2005; WHO 2006c). Thus, while awaiting more conclusive evidence on the cost-effectiveness of PPM-based approaches, high-burden countries should not lose sight of what has been clearly demonstrated to be efficient and effective and is generally accepted (Mahendradhata et al. 2003; Tang & Squire 2005) as being indispensable for making further progress towards attaining TB control targets: strengthening the general public health system.

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