



## Why we need to evaluate the quality of tuberculosis care in South Africa's private health sector

**To the Editor:** Poor-quality tuberculosis (TB) care is now a larger barrier to reducing mortality than poor access.<sup>[1,2]</sup> South Africa (SA) has one of the highest TB burdens globally. Despite ongoing efforts to improve access to testing and treatment in primary care settings,<sup>[3]</sup> only half of South Africans with drug-susceptible TB and 22% with rifampicin-resistant TB successfully navigate TB care pathways in the public sector.<sup>[4]</sup> Furthermore, a recent study showed that 29% of South Africans with TB symptoms first report to the private sector.<sup>[5]</sup> Delays in TB diagnosis have been reported in the public and private sectors.<sup>[6,7]</sup> Efforts to evaluate and improve quality of TB care must therefore involve both sectors.

The standardised patient (SP) methodology, which involves the training of individuals to act as 'mystery patients', has helped to identify early bottlenecks in the TB care cascade. SP studies in India, China, Kenya and SA<sup>[8-12]</sup> have shown that, with regard to TB testing, higher-level clinics generally do better than lower-level clinics, formal practitioners outperform informal practitioners, and public providers perform better than private health carers (Fig. 1).<sup>[13]</sup> In a recent study, providers at public clinics in urban SA performed comparatively well – sputum for GeneXpert (Cepheid, USA) testing was collected in 84% of SP encounters, HIV testing was done in 47%, and unnecessary prescriptions were provided for only 26%.<sup>[8,13]</sup> SA's leading role in prioritising TB in policy and practice possibly contributes to its strong public sector performance.<sup>[14-16]</sup> However, it is unclear to what degree recent advancements in TB screening and care recommendations have permeated the private sector.

In other high-burden countries, such as Kenya and India, when SPs presented with classic TB symptoms, nearly all private practitioners were found to dispense and collect fees for medications, including antibiotics and steroids.<sup>[13]</sup> Such clinical practices could delay diagnosis and/or harm patients with undiagnosed TB.<sup>[13]</sup> In SA, however, general practitioners (GPs) cannot profit from medication dispensing and many include the cost of common medications in their consultation fee, thus removing financial incentives for dispensing, as has been suggested in other

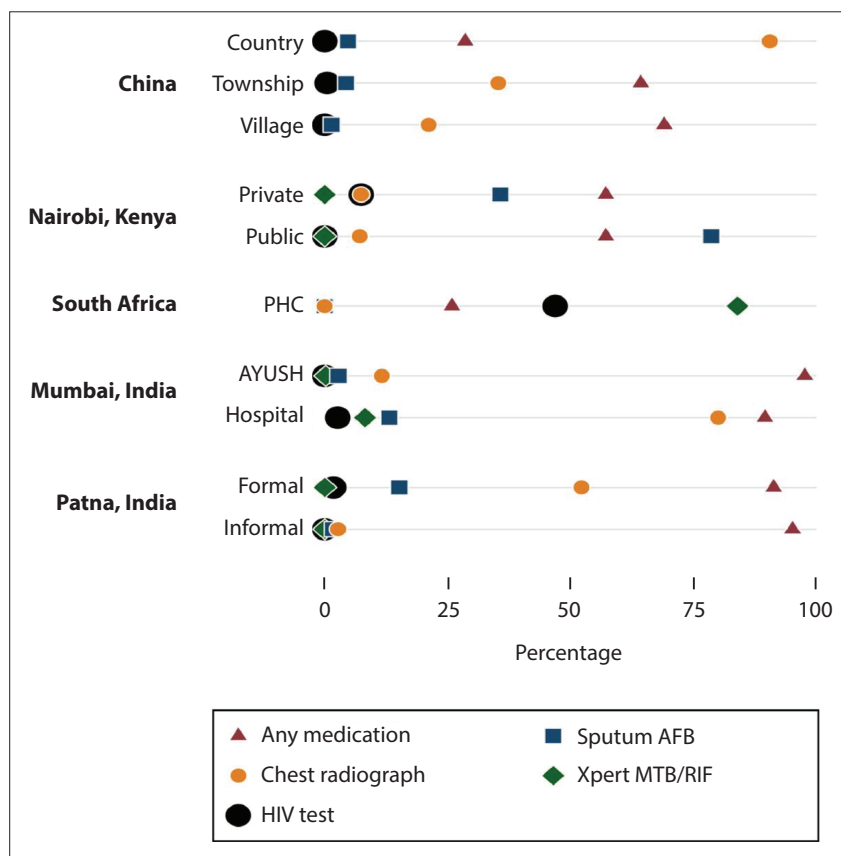


Fig. 1. Key findings of standardised patient studies on how suspected tuberculosis was managed.<sup>[13]</sup> (PHC = primary health centre; AYUSH = practitioners trained in Ayurveda, Yoga and naturopathy, Unani, Siddha, and Homeopathy; AFB = acid-fast bacillus; MTB/RIF = Mycobacterium tuberculosis/rifampicin.)

settings.<sup>[13,17]</sup> In India, private practitioners are commonly involved in TB treatment,<sup>[18]</sup> and referral to the public sector for free TB testing and treatment is as low as 4%.<sup>[11]</sup> Conversely, SA physicians do not traditionally treat TB in the private sector<sup>[19]</sup> and there are few existing public-private TB programmes. Hence, private GPs may be more likely to refer patients with TB to the public system. A systematic study evaluating quality of care, including drug dispensing and referral practices, would identify current practices in the private sector, as well as strategies for more effective GP engagement.

TB remains a daunting health problem in SA. Efforts to improve access to TB care must be coupled with commensurate efforts to improve healthcare quality. SP studies have been used in high-burden settings to describe the quality of TB care. As nearly one-third of symptomatic TB patients first present to the private sector in SA, the SP methodology would be a useful approach to understand and describe current practices among private healthcare providers.

**Author contributions.** JB researched and drafted the manuscript; SM contributed to the concept of the manuscript and critically edited the content; JC, AS, SJ, TM critically edited the manuscript content; MP suggested references, provided funding and critically edited the content; AD contributed to the concept of the manuscript, suggested references, provided funding and critically edited the content.

**Funding.** Funding for the manuscript was provided by the Bill & Melinda Gates Foundation from a grant (OPP1172634) jointly held by AD and MP.

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1. Kruk ME, Gage AD, Arsenaault C, et al. High-quality health systems in the sustainable development goals era: Time for a revolution. *Lancet Glob Health* 2018;6(11):e1196-e1252. [https://doi.org/10.1016/S2214-109X\(18\)30386-3](https://doi.org/10.1016/S2214-109X(18)30386-3)
2. Scott V, Azevedo V, Caldwell J. Improving access and quality of care in a TB control programme. *S Afr Med J* 2012;102(11):837-840. <https://doi.org/10.7196/SAMJ.5469>
3. World Health Organization. Global TB Report 2018. Geneva: WHO, 2018. [https://www.who.int/tb/publications/global\\_report/gtbr2018\\_annex2.pdf?ua=1](https://www.who.int/tb/publications/global_report/gtbr2018_annex2.pdf?ua=1) (accessed 8 July 2019).
4. Naidoo P, Theron G, Rangaka MX, et al. The South African tuberculosis care cascade: Estimated losses and methodological challenges. *J Infect Dis* 2017;216(Suppl 7):S702-S713. <https://doi.org/10.1093/infdis/jix335>

5. Chin DP, Hanson CL. Finding the missing tuberculosis patients. *J Infect Dis* 2017;216(Suppl 7):S675-S678. <https://doi.org/10.1093/infdis/jix368>
6. Skordis-Worrall J, Hanson K, Mills A. Confusion, caring and tuberculosis diagnostic delay in Cape Town, South Africa. *Int J Tuberc Lung Dis* 2010;14(2):171-180.
7. Meintjes G, Schoeman H, Morroni C, Wilson D, Maartens G. Patient and provider delay in tuberculosis suspects from communities with a high HIV prevalence in South Africa: A cross-sectional study. *BMC Infect Dis* 2008;8(1):72. <https://doi.org/10.1186/1471-2334-8-72>
8. Christian CS, Gerdtam UG, Hompashe D, Smith A, Burger R. Measuring quality gaps in TB screening in South Africa using standardised patient analysis. *Int J Environ Res Public Health* 2018;15(4):729. <https://doi.org/10.3390/ijerph15040729>
9. Das J, Kwan A, Daniels B, et al. Use of standardised patients to assess quality of tuberculosis care: A pilot, cross-sectional study. *Lancet Infect Dis* 2015;15(11):1305-1313. [https://doi.org/10.1016/S1473-3099\(15\)00077-8](https://doi.org/10.1016/S1473-3099(15)00077-8)
10. Daniels B, Dolinger A, Bedoya G, et al. Use of standardised patients to assess quality of healthcare in Nairobi, Kenya: A pilot, cross-sectional study with international comparisons. *BMJ Glob Health* 2017;2(2):e000333. <https://doi.org/10.1136/bmjgh-2017-000333>
11. Kwan A, Daniels B, Saria V, et al. Variations in the quality of tuberculosis care in urban India: A cross-sectional, standardized patient study in two cities. *PLoS Med* 2018;15(9):e1002653. <https://doi.org/10.1371/journal.pmed.1002653>
12. Sylvia S, Xue H, Zhou C, et al. Tuberculosis detection and the challenges of integrated care in rural China: A cross-sectional standardized patient study. *PLoS Med* 2017;14(10):e1002405. <https://doi.org/10.1371/journal.pmed.1002405>
13. Daniels B, Kwan A, Pai M, Das J. Lessons on the quality of tuberculosis diagnosis from standardized patients in China, India, Kenya, and South Africa. *J Clin Tuberc Other Mycobact Dis* 2019;16:100109. <https://doi.org/10.1016/j.jctube.2019.100109>
14. Stevens W. GeneXpert implementation in South Africa public sector: One year later ... lessons learnt. 2012. <http://www.stoptb.org/wg/gli/assets/html/day%203/Stevens%20-%20South%20Africa.pdf> (accessed 3 July 2019).
15. National Department of Health. Guidelines for Tuberculosis Preventive Therapy Among HIV Infected Individuals in South Africa. Pretoria: NDoH, 2010. [https://www.who.int/hiv/pub/guidelines/south\\_africa\\_hiv\\_tb.pdf](https://www.who.int/hiv/pub/guidelines/south_africa_hiv_tb.pdf) (accessed 3 July 2019).
16. National Department of Health. Interim Clinical Guidance for the Implementation of Injectable-free Regimens for Rifampicin-resistant Tuberculosis in Adults, Adolescents, and Children. Pretoria: NDoH, 2018. [http://www.tbonline.info/media/uploads/documents/dr\\_tb\\_clinical\\_guidelines\\_for\\_rsa\\_september\\_2018.pdf](http://www.tbonline.info/media/uploads/documents/dr_tb_clinical_guidelines_for_rsa_september_2018.pdf) (accessed 3 July 2019).
17. Choonara S, Eyles J. Out of control: Profit-seeking behaviour, unnecessary medical procedures and rising costs of private medical care in South Africa. *BMJ Glob Health* 2016;1(1):e000013. <https://doi.org/10.1136/bmjgh-2015-000013>
18. Byass P. Tuberculosis: A private and public health and data mix. *Lancet Infect Dis* 2016;16(11):1206-1207. [https://doi.org/10.1016/S1473-3099\(16\)30334-6](https://doi.org/10.1016/S1473-3099(16)30334-6)
19. TB Diagnostics Market Analysis Consortium. Market assessment of tuberculosis diagnostics in South Africa, 2012 - 2013. *Int J Tuberc Lung Dis* 2015;19(2):216-222. <https://doi.org/10.5588/ijtld.14.0565>

*S Afr Med J* 2019;109(11):817-818. <https://doi.org/10.7196/SAMJ.2019.v109i11.14351>