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Tuberculosis active case-finding: more than just finding cases



Flicker/Nick Jewell

In *The Lancet Infectious Diseases*, Matthew Saunders and colleagues¹ describe a long-term active case-finding intervention for tuberculosis among households in shanty towns in Callao, Peru. They used home visits over a 10-year period to screen household contacts of an index patient for tuberculosis disease. Although the absolute number of cases found through the active case-finding intervention was modest compared with the number diagnosed by passive case-finding at health facilities, women were preferentially diagnosed through the home visits (36 [68%] of 53 cases diagnosed through active case-finding were female vs 85 [47%] of 179 diagnosed through passive-case-finding; $p=0.009$). Saunders and colleagues propose that the visits might have overcome a health-care access gap that leads to disproportionate underdetection of tuberculosis among women in this setting. Sparse prevalence survey data from Latin America make it difficult to know whether the case detection gap is truly larger for women in this region, distinct from other parts of the world.² Regardless, the study by Saunders and colleagues shows that patients found through active case-finding can differ from those who are routinely diagnosed in health facilities. Thus, active case-finding can promote equity through preferential detection of tuberculosis in populations who face barriers to accessing health services.³ These vulnerable individuals are probably over-represented among the so-called

missing 4 million tuberculosis patients—that is, the gap between the 6 million people diagnosed and 10 million estimated patients with tuberculosis annually.⁴

The study by Saunders and colleagues also emphasises a benefit of active case-finding that is ignored when people focus solely on increasing the numbers of cases detected—namely, the benefit of early diagnosis. The greater proportion of sputum smear-negative cases found through active case-finding in the study (33 [62%] of 53 vs 62 [35%] of 179 found by passive case-finding; $p=0.0003$) highlights that contact investigations diagnose people earlier, when they are less infectious, thus reducing transmission. However, more sensitive diagnostic technologies—eg, chest radiography⁵ and molecular testing for *Mycobacterium tuberculosis* and rifampicin resistance mutations⁶—will be vital if programmes are to maximise the benefits of active case-finding.

The study by Saunders and colleagues also highlights the opportunity lost by not giving preventive treatment to adult contacts of tuberculosis patients—a group for whom such treatment is considered optional, according to latest WHO guidance.⁷ Adult contacts had a substantially increased risk of developing tuberculosis that persisted for 3–4 years. Only a third of contacts who ultimately got sick were diagnosed within a year of the index patient; more cases were diagnosed over the

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next 3 years. This prolonged increase in risk is similar to that seen in low-incidence countries,⁸ suggesting that even in this high-burden setting, reactivation rather than reinfection dominates the risk in these initial years. Together, these results support giving preventive treatment to adult household contacts in high-incidence settings. Moreover, household interventions provide a platform for delivering preventive treatment in adults, who are already being assessed as part of contact investigations and whose children or younger siblings might already be receiving preventive treatment.

Comprehensive approaches that actively detected, prevented, and treated all forms of tuberculosis were key to pronounced declines in tuberculosis in New York in the 1990s⁹ and in Alaska decades earlier.¹⁰ Achieving the Sustainable Development Goal of ending the global tuberculosis epidemic by 2030 will require proactive use of the full arsenal of interventions available today, and rapid integration of innovation, to promptly reach high-risk and vulnerable populations with preventive and curative treatments.^{11,12} Tuberculosis has long been recognised as a disease linked to inequality; active case-finding strategies that promote equity are essential to disrupt that link.

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Ebola: public trust, intermediaries, and rumour in the DR Congo

In *The Lancet Infectious Diseases*, Patrick Vinck and colleagues¹ report on institutional trust and misinformation in relation to the most recent Ebola outbreak in the DR Congo. This Article is timely and important. As the authors imply, the Congolese people have been taught by bitter experience to distrust authority, in ways that make it difficult to sustain public health interventions. The cancellation of the 2018 presidential election in the Ebola-affected regions of Beni and Butembo is, for example, strongly linked in the public mind with the rigging of the national ballot.

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Solutions to the problems of trust are more difficult than identifying them. The Article proposes engaging with “locally trusted leaders”, but establishing whom these might be is no simple matter. I would like to encourage the researchers to pursue one implication of the paper—that the effort to discern the wishes of the community should not confuse the general will of the population for the wishes of a few local intermediaries. The role of an intermediary, who trucks between powerful outsiders and the interior is a recurrent feature of west and central Africa’s violent,

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