

WORLD TB DAY

Accurate TB tests needed in the private sector

More affordable tests should be introduced in the private sector as 70% of Indians seek private medical care for TB.

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Tuberculosis (TB) continues to take a heavy toll on Indians. Every year, India reports over two million TB cases. TB kills nearly 280,000 men, women and children and is one of the leading causes of death in the country. In the past year, untreatable forms of drug-resistant TB cases have been reported in cities like Mumbai.

TB mostly affects the lungs and the most important symptoms include chronic cough for two weeks or more and fever. If TB is diagnosed quickly and if six months of antibiotics are taken regularly, nearly all patients can be fully cured.

The Indian government has made great progress by providing TB diagnosis and treatment free of cost to all patients in the public sector. Recently, the Revised National TB Control Programme (RNTCP) announced “universal access to quality TB diagnosis and treatment for all TB patients in the community” as its new goal for the next five-year

plan. This is a laudable goal, but any plan to reach all TB patients in India will need to necessarily consider engagement of the private sector.

THE PRIVATE SECTOR'S ROLE

More than 70% of Indians seek first contact medical care in the private sector, and more than 50% of all TB patients in India are treated in the private sector. For TB care, patients often begin seeking advice in the informal private sector (chemists and unqualified practitioners), then seek care from qualified practitioners, and eventually end up in the public sector for free treatment. Patients often move from one provider to another, before they are finally diagnosed and put on TB treatment. And while they do this, they continue to transmit the infection to others.

Thus, delayed or incorrect diagnosis is a major driver of the epidemic, and greatly increases the chance of death and drug-resistance. Poverty-stricken TB patients also seek private care where the

costs of care can be quite high and push poor families further into bankruptcy.

Unfortunately, TB testing practices in the private sector are completely different from those in the public sector. All over the world, sputum is the most important sample for diagnosis of lung TB and every guideline recommends the use of sputum-based tests. But, for several reasons, including poor regulation and financial incentives, blood is the most popular sample in the Indian private sector. Unfortunately, it is not possible to detect TB in blood samples.

Blood-based antibody tests are not accurate and discouraged by RNTCP and the World Health Organization (WHO).

Blood PCR tests are unreliable and not recommended by any agency. There are acceptable blood tests (such as TB Gold) for latent TB. These, however, are not recommended for pulmonary TB diagnosis. In 2012, the Government of India banned the use of antibody blood tests for TB, and has discouraged the use of tests like “TB Gold” for active TB.



Although sputum tests are recommended in guidelines for TB diagnosis, blood tests are preferred by the private sector. Blood tests are unreliable and are not recommended by any agency.

REPLACING BAD WITH THE GOOD

The question now is, how can good, sputum-based TB tests replace the inappropriate blood tests in the private sector? There are four accepted sputum tests that are recommended by the WHO and these are also used by the RNTCP.

This includes the traditional sputum smear test where the TB bacteria are seen un-

der a microscope. Although not highly accurate, this test is still useful (and cheap) and should be more widely used in the private sector. Recently, the WHO endorsed a new, rapid, two-hour DNA test called GeneXpert, which can diagnose TB with great accuracy and can also detect those with drug-resistance. There is another DNA test called Line Probe Assay and this test can also detect drug-resistance with high accu-

racy. Lastly, liquid culture, where bacteria are grown in tubes, is considered the gold standard for TB diagnosis and is the only test that can detect resistance to all major TB drugs.

If private physicians and laboratories replace blood tests with the above sputum tests, this should greatly help improve the accuracy of TB diagnosis for patients in the country. The challenge is that good tests like GeneXpert, Line Probe Assay and liquid culture are very expensive in the private sector. For example, the GeneXpert test can cost the patient as much as Rs 3,000 or higher in private laboratories. This is because WHO-endorsed tests are available at specially negotiated low prices only to the public sector, and import duties also add to the costs. In addition, financial incentives and laboratory margins further inflate the costs to make them virtually unaffordable to the average private sector patient.

MAKING GOOD TESTS MORE AFFORDABLE

Thankfully, a new initiative

is just being launched, to improve the affordability of WHO-endorsed TB tests. Initiative for Promoting Affordable, Quality TB tests (IPAQT www.ipaqt.org) is a coalition of private labs in India, supported by industry groups such as FICCI, that has made three WHO-approved tests available at affordable prices to patients in the private sector. Labs in IPAQT have access to lower, negotiated prices for the quality tests in exchange of their commitment to pass on the benefits to patients.

Thanks to IPAQT, which operates on a high-volume, low-margin model, the cost of GeneXpert is now reduced to Rs 1,700 (the maximum price laboratories can charge patients). The line probe assay (Hain Genotype) is now available at Rs 1,600. Laboratories in IPAQT will also offer other WHO-endorsed tests at transparently advertised prices. TB cases diagnosed will be notified to the RNTCP for linkages to free TB drugs, where necessary.

The IPAQT initiative has a pan-India presence, with over 25 laboratories (which adds up to over 20,000 col-

lection centres all over the country) committed to providing these tests at affordable prices. The number of laboratories is expected to increase significantly in the months ahead. The initiative can also be extended to include other new diagnostics in future, and cover other diseases of importance.

Thus, this initiative is expected to greatly increase affordability for private sector patients, and improve the quality of TB care in the country. In the long run, removal of import duties for all TB tests (under lifesaving drugs exemption) along with encouraging domestic development of the same will be critical to achieving the RNTCP goal of universal access. India's private sector has a responsibility and an obligation to make a contribution to TB control. Because TB is a huge economic drain on India and mostly affects young, productive adults, the private sector clearly stands to benefit from any initiative to reduce the TB burden.

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