

TB-HIV: Challenges for Newer Initiatives in India

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Tuberculosis (TB) and HIV synergistically form a deadly duo, often leading to unfavorable outcomes in patients co-infected with these diseases. The risk of developing TB is between 20 to 37 times greater in people living with HIV compared to those without HIV.¹ Annually 110,000 HIV associated TB cases emerge from India, out of which 31,000 die each year, making India the second highest burden country for people living with this co-morbidity.² To effectively tackle this issue, joint TB-HIV collaborative activities are being implemented by Revised National TB Control Programme (RNTCP) and National AIDS Control Programme (NACP) since 2001.³ The key interventions were to detect TB-HIV cases early and prompt initiation of anti-retroviral and anti-tubercular treatment.

As per the 2015 Global TB Report, India has 1,034,712 (61%) TB patients who knew their HIV status; of which 44,171 (4.3%) were positive for HIV and 41,066 (93%) among them were on co-trimoxazole preventive therapy (CPT) and 39,800 (90%) were on anti-retroviral therapy (ART).² Although, a national policy identification of TB patients with co-infected HIV remains an issue in majority of the states. A case fatality rate among the notified HIV positive TB patients is about 13% which is four times that among HIV negative TB patients.

To bridge the gaps in the implementation of TB-HIV activities and to reduce the burden of TB among people living with HIV (PLHIV), the National framework for joint HIV-TB collaborative activities has envisaged on the four prong strategy (a) Early detection of TB-HIV: It includes provider initiated testing and counseling for all TB patients and presumptive TB cases, rapid detection of TB and drug resistant TB among people living with HIV (PLHIV) and intensified case finding activities at all HIV settings (b) Prompt treatment of TB-HIV: It includes early initiation of ART and prompt initiation of TB treatment (c) Management of special TB-HIV cases: It includes management of TB-HIV in children, pregnant women, drug resistant TB and patients on protease inhibitor based anti-retroviral treatment (d) Prevention: It includes isoniazid preventive treatment, air borne infection control and awareness generation.³

The programme is committed to implement all the components of the strategy. All PLHIV co-infected with TB are provided ART irrespective of CD4 count and CPT. To detect tuberculosis and drug resistant tuberculosis early amongst PLHIV, rapid diagnostic tests such as cartridge based nucleic acid amplification test (CBNAAT) is introduced as a front line diagnostic test with planned nationwide scale-up. Introduction of isoniazid preventive therapy (IPT) for all PLHIV who do not have active TB is a policy and will be rolled out in phased manner. A decision to provide daily anti-tubercular treatment (ATT) to all PLHIV is made and is being implemented at thirty high burden ART centres. Plan to effectively implement airborne infection control measures at ART centres is in progress. However, the implementation and uptake of these newer components in the field is a real challenge for both the programmes and requires special support to create conducive environment for implementation.

The challenges faced in few difficult areas and the possible solutions are discussed below. The overarching principle for effective implementation of collaborative activities is the integration of the

two national programmes from the point of policy making to service delivery. The spread of both the diseases vary in the country; TB is a generalized epidemic while HIV is a concentrated epidemic and hence the health infrastructure for service delivery is not uniform all over the country. The organizational structure for service delivery is vertical for NACP programme when compared to RNTCP. Though, both the programmes are guided by joint national TB-HIV policies which profoundly mention about the mechanisms for collaboration, there is a need for alignment for priority in service delivery which should now focus on (1) reducing the dropouts during cross referrals (2) screening of PLHIV specially concentrating on the key population (3) co-location of health facilities for patients' benefit. Emerging new pockets of HIV in hitherto low HIV prevalence states where general health systems are sub-optimal further add up to the challenge of low HIV testing coverage among TB patients. Ideally, the programme should work towards single window delivery which will help in timely diagnosis, early treatment initiation and minimize linkage loss during the cascade of cross referrals which will lead to better patient outcomes. Second, there has been deployment of CBNAAT diagnostics at high prevalent HIV states. However, there are implementation issues with wide scale deployment such as provision of infrastructure, human resources and sustainability of recurring cartridge expenditure. Third, the concept of TB prevention and reducing TB burden in PLHIV is not well acknowledged in private sectors. The acceptability of IPT amongst treating physicians varies; majority of them contemplate the usefulness to the patient and the community. In the public sector, the programme has to ensure mechanisms for screening and a real time monitoring of patients on isoniazid before plunging into programmatic IPT implementation. Strengthening four symptom complex screening in all HIV settings for TB through trainings and supportive supervision, for timely referral of presumptive TB cases for diagnosis should be the prime focus (4) the toughest of all the components is ensuring infection control measures at public health facilities. The implementation needs a higher administrative commitment to make necessary infrastructural changes in the health facility. Necessary modification of the buildings in accordance to the infection control measures is a herculean task in a government setup in India and it may require long years for implementation. The hospital management should also train their medical and paramedical workers on airborne infection control measures and should be stringent in implementation (5) Lastly, there is a limited involvement of the community for implementation of HIV-TB collaborative activities. Active involvement of NGOs and the community for intensified case finding among PLHIV especially for key population in community settings will yield dividends in the longer run.

In conclusion, the new strategies adopted by National TB-HIV collaborative activities surely lead to the targets for sustainable development goals by 2030;⁴ however, it needs to be implemented with complete vigor backed by political and administrative commitment. Also, there has to be equipoise alignment between both the programmes at all levels.

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