

Active tuberculosis case-finding (ACF) through IMPACT TB and TB REACH Wave 5 in Nepal: Additional yields and potential contribution to the National Strategic Plan

Issue brief for the National Tuberculosis Center



BACKGROUND

The National TB Center (NTC) has recently conducted the first ever TB prevalence survey in Nepal, preliminary results of which showed a 70% higher TB prevalence than previously estimated.

Nepal must close the case detection gap by diagnosing and treating every case of TB with high quality care. Only then can the country increase case notifications by at least 20,000 additional cases by 2025 as described in the country's National Strategic Plan and accelerate progress towards ending TB by 2030.

Active case-finding (ACF) is an essential component of a comprehensive strategy to detect, treat and prevent TB. Given Nepal's diverse geography and ethnic composition, ACF is particularly important to ensure equitable access to TB diagnosis and care among the most vulnerable populations. However, poorly implemented ACF can draw resources from passive case-finding.

ACF projects have shown mixed results in Nepal and it is key to learn lessons from failed approaches while improving and scaling up successful ones. The BNMT/IMPACT TB project evaluated the yields of ACF using GeneXpert (Chitwan and Dhanusha) or smear microscopy (Mahottari and Makwanpur) as the primary diagnostic test. Also, the BNMT/TB REACH Wave 5 project implemented ACF using GeneXpert (Bardia, Gulmi, Kapilvastu and Pyuthan) or smear microscopy (Acchham, Argakhachi, Doti and Salyan). The results of both projects show strong additionality and lessons for scale-up.

PROBLEM STATEMENT

Evidence is needed on optimal case-finding approaches in Nepal to achieve the targets identified in the National Strategic Plan.

KEY FINDINGS

1. ACF using GeneXpert detects more cases than smear microscopy.
2. BNMT/ IMPACT TB had a raw yield of 1,133 cases and an additionality of >13% in districts using GeneXpert (preliminary year 1 results July 2017-June 2018).
3. BNMT/TB REACH Wave 5 had a raw yield of 1,092 cases and an additionality of 12%.
4. Districts with strong commitment of and coordination with government staff achieved the highest yields. Outpatient screening in government district hospitals also obtained high yields.



Photo: BNMT Nepal

PRIORITY ACTIONS

- 1.** Develop national ACF guidance to ensure better prioritization of high-risk groups.
- 2.** Increase and improve the management of human resources for effective and sustained ACF strategies alongside strengthening of passive case-finding.
- 3.** Install GeneXpert in all district government hospitals and train health workers on its appropriate use.
- 4.** Ensure strong management structures and effective integration of National TB Programme and Global Fund activities for all ACF projects.
- 5.** Consider the restructuring of compensation for reaching the remotest populations.

IMPLEMENTATION CONSIDERATIONS

1. National ACF guidance:

- Always screen contacts of people with TB and people living with HIV;
- Prioritize additional risk groups based on the national context and after assessing potential benefits and harms in relation to costs for each group; and
- Design high-risk group specific algorithms (using x-ray for some, e.g. people living in slums or prisoners).

2. Human resources:

- Develop a stepwise plan including comprehensive resourcing for ACF scale-up in selected areas in Nepal; and
- Apply to Global Fund for increased resource allocation, while also advocating for increased government funding.

3. GeneXpert installation and health worker training:

- Identify funding requirements for comprehensive GeneXpert coverage in district hospitals;
- Develop a scale-up and advocacy strategy, as well as a strengthening plan; and
- Apply innovative techniques such as virtual implementation modeling to determine optimal district wise number and placement of GeneXpert machines.

4. Management structure and integration:

- Disseminate information on necessity of ACF at provincial and local levels; and
- Develop and test innovative approaches in synergy with national government implementation.

5. Outreach workers:

- Test innovative models to support transport and access for volunteers to facilitate ACF in most difficult to reach groups.

IMPACT TB

IMPACT TB aims to find and treat cases of TB in communities in both Nepal and Vietnam. It is funded by the European Union's Horizon 2020 programme. www.impacttbproject.org

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