Reducing Delays among TB patients in Bengaluru through the **Tuberculosis Health Action Learning Initiative (THALI)**

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Persons with symptoms of tuberculosis (TB) often delay seeking treatment due to numerous factors, and this period, combined with a delay in diagnosis and initiation of treatment, can lead to a worsening of their conditions, reducing their chances of recovery and raising the risk of infecting others.

Study objectives

We measured the change in patient and health system delays among adult TB patients in the urban slums of Bengaluru over three years, and pooled data from Bengaluru and Hyderabad to explore how THALI's community engagement could have influenced this change, through matching methods analysis.



THALI's Impact in Bengaluru and Hyderabad cities



The study found that exposure to THALI's IEC materials and community activities, including in-person communication, sensitization meetings, patient support group meetings, meetings and mass campaigns, follow-up visits, and screening for symptoms, reduced patient delay.



Reductions in delays were evident across gender and socio-economic variables. Reductions in delay were also evident irrespective of the type of provider visited and distance of the testing center from the residence of the patient.

There was a non-significant reduction in delay among those who waited for someone other than a family member to accompany them.



Study Coverage

Sample coverage details of contacted NSP patients in the baseline and end-line surveys, Bengaluru,

| Status of Survey | Baseline | | End-line | |
|------------------------|-----------------|---------|-----------------|---------|
| | Number of Cases | Percent | Number of Cases | Percent |
| Contacted | 290 | 100 | 285 | 100.0 |
| Unavailable | 41 | 14.1 | 18 | 6.3 |
| Refused | 20 | 6.9 | 41 | 14.4 |
| Interview Completed | 229 | 79 | 226 | 79.3 |



Distribution of respondents according to the visit number at which they were first identified as TB- positive and at which they started TB treatment

The proportion of respondents identified as TB positive on or before their third visit to a healthcare provider increased from 57% to 93%.

56% of patients were initiated on treatment on or before the third visit to healthcare provider in the baseline, and this increased to 89%.



A shift to earlier recommendations for a sputum test, particularly among respondents who visited a public health facility, and a majority of patients undergoing the recommended tests reflected in a reduction in diagnostic delay.

The increase in treatment delay indicates that there could be a few respondents who are going for more than one test to confirm or may be waiting for a second opinion initiating TB treatment immediately after diagnosis.

Program Implications

- Delays increase when patients 'shop' for multiple healthcare providers, often between the public and private sector. Our findings highlight the possibility that patients visit multiple providers because they do not immediately accept a diagnosis of TB.
- Patient need counselling prior to and immediately after a diagnosis of TB, to help them to better understand the disease, accept the TB diagnoses and to stay adherent to treatment.
- Delays in seeking treatment could be reduced when a family member supports TB symptomatics to confirm their diagnosis. Spouse and parents can play an important role in accompanying them.
- THALI's interventions did not have a direct impact on reducing health system delay, as the project did not engage with healthcare providers directly after the initial years.



