

“Using Gene Xpert to Reach the Unreached: Mobile Diagnostic Case Finding in Nepal” is a TB REACH project delivered by HERD that is supporting the National Tuberculosis Control Programme to meet its target of detecting 82% of TB cases in Nepal. In Nepal, it is the poorest and most vulnerable who are at greatest risk of illness from TB, as well as the least likely to seek diagnosis. Through this project, HERD aims to screen 301,268 individuals among some of the most vulnerable groups, a population for whom TB services are currently missing. Through this targeted approach, the project expects to identify over 3,136 cases of bacteriologically positive TB (MTB+) among slum communities, PLHAs, prisoners, factory workers, diabetics, refugees, and household contacts of people living with TB.



Nepal Health Research and Social Development Forum (HERD)

The project covers 29 municipalities spread across 22 districts. Within Nepal, the urban poor are already underserved in healthcare, even as their numbers increase as cities continue to grow. In response to this, the project is specifically targeting the urban population. As part of the project's intervention, six Xpert MTB/RIF diagnostic centres are being established, with four static units and two mobile units. This will enable rapid diagnosis and

treatment of all TB and MDR cases. HERD has robust systems in place to ensure that case finding and referral strategies are monitored and, after consideration, can be adapted.

To ensure that lessons can be learned from this important project, an operational research approach is being taken to consider the interventions' overall mechanism of TB and MDR case-finding. Specifically, this involves:

- **Measurement of Diagnosis Delay:** In order to understand the impact of diagnostic delay on severity of TB and level of case finding, a comparison will be made between diagnosis at the treatment centres and diagnosis at home, using indicators such as time needed to reach the treatment centre, performing the sputum test, and taking medication.
- **Analysis of Cost Effectiveness:** The need to visit health care facilities for diagnosis and treatment can be costly for the majority of service seekers and represents a significant deterrent to accessing health care for the poorest individuals. The door-to-door approach used in this project has the potential to increase case finding as well as to reduce patient costs. Cost effectiveness analysis will be used to compare costs borne at the health facilities with those at the household level.
- **Process Documentation:** A project of this scale will highlight many implementation concerns. Process documentation will monitor these issues through detailed observations during field work. These will be reflected upon to inform the project and to document these lessons learnt for key stakeholders working in the field.
- **Participatory Approach:** It is believed that involving urban populations in their respective communities will influence program effectiveness. The expectation is that involvement of local populations will encourage participation and increase the interest level about the program within that population. The project will draw on a variety of community development and participatory approaches and document these for shared learning.

Nepal



This project is not just about meeting the numeric target of 82% case detection and an additional 3,136 MTB+ cases, as vital as that is. The operational research elements will also build a deeper and crucial understanding of the core issues related to TB case detection in Nepal. The advantages of such an approach will be twofold: meeting the target of additional cases, and providing recommendations to the NTP to make necessary revisions in the government's strategy for the treatment of tuberculosis in future case-finding implementation.



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