Ethiopia

Strengthening Urban Health Extension Program in Addis Ababa to find the missing persons with TB

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Background
Ethiopia is one of the 30 countries with a high TB burden. According to the 2017 WHO report, 182,000 people in Ethiopia (including approximately 24,000 children) were estimated to have developed TB in 2016. In the same period however, only around 127,500 patients were enrolled in the TB program. This equates to over 30% of persons with TB being missed (around 55,000 patients, including around 9,000 children).

Addis Ababa, the capital and largest city in Ethiopia, has an estimated population of 3,384,569, 50% of whom are living in overcrowded slums and informal settlements. Community Based TB Care (CBTBC) using Urban Health Extension Workers (UHEWs) has been identified as one of the critical strategies for early identification of TB presumptive patients, especially in densely populated settings like urban slums. However, in two overcrowded urban districts (known as woreda), namely Addis Raey with 35,272 inhabitants and Yeka Woreda 12 with 41,048 inhabitants, the contribution of the UHEWs in case finding was low.

UHEWs, who are employed by the government, receive a one-year training course in primary health care, including field work. Their limited TB control tasks are to identify presumed TB patients in the community and refer them to the health center. Each UHEW is attached to a specific health center and supervised by Environmental Health officers.

FTMP implementation area: Community Engagement

Description of the intervention
The KNCV led, Challenge TB project, in collaboration with the Addis Ababa Health Bureau, selected three woreda (Addis Raey, Yeka W12, Kolfe W3) based on the following criteria:
1. A high TB notification rate
2. The presence of informal settlements that are underserved by the routine public health structure and other sectors.
3. Inadequate performance of the UHEWs in TB active case finding.

A baseline assessment was conducted together with the regional health bureau & sub-city to obtain insight into the status of CBTBC activity in the selected districts.

The main findings of the assessment were:
- Community based TB activities were not included in the UHEWs activity plan, even though community TB Care is part of the UHEW package.
- The UHEWs were not routinely involved in contact investigation (CI).
- The number of presumptive TB patients referred by UHEWs was very low. For example, of the 420 expected presumptive TB patients, only 45 were referred by UHEWs in the 6-month period before the intervention.
- UHEWs were not making use of the presumptive TB logbook which made reporting UHEWs contribution to case finding activities difficult.
- Despite available columns in Health Centre (HC) Unit TB registers, reporting on the contribution of UHEWs in TB case finding was minimal.
- There was a weak referral linkage between HC and Health Extension Program (HEP); the HEP guidelines, describing the referral, communication and feedback between the HEP and the HC center was not put in practice.
**Actions taken after baseline assessment findings**

- One day orientation for all UHEWs and their supervisors took place, aimed at boosting commitment and building skills for community based active case finding.
- Introduce TB screening in the UHEWs’ house-to-house visits.
- The TB clinic became the initial entry point for UHEWs’ referred presumptive TB patients (with a referral slip), hence bypassing the OPD. This resulted not only in a shorter patient pathway but also minimized the risk of losing the referred presumptive TB patients.
- A mass house-to-house, 7-day TB screening campaign was implemented to create TB awareness in the selected woreda and find persons with TB.

**Mass screening approach**

Each UHEW managed an average of 20 household visits per day. During these visits, the UHEW provided TB health education and by using a TB symptoms checklist, asked about signs and symptoms of TB. 36 UHEWs and two UHEWs coordinators were involved in this activity. A person with presumptive TB was referred with a referral slip directly to the nearby HC TB clinic. UHEP supervisors had daily meetings with the TB focal person to verify the registration of the referred person at the HC. They were evaluated clinically by the TB Clinic staff, and sputum samples were collected and tested by GeneXpert.

The expected increase in the number of presumptive TB patients and staff workload due to this mass screening was discussed with the main stakeholders. This allowed them to proactively arrange essential resources like additional cartridges and falcon tubes and staffing time for sample handling.

**Mass screening results**

The results of the one-week mass screenings are presented in table 1. This depicts a significant improvement compared with the results from the previous quarter of the same year (Q2) when UHEWs identified and referred only 3 of the 102 TB patients detected in the selected HCs.

<table>
<thead>
<tr>
<th>Activities in 7 days, in quarter 3 of 2010 Ethiopian Calendar (EC)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of people screened</td>
<td>15,800</td>
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<tr>
<td>Number of presumptive TB patients identified and referred to nearby HC</td>
<td>262 (1.6%)</td>
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<tr>
<td>Number of presumptive TB patients tested with Xpert</td>
<td>262 (100%)</td>
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<tr>
<td>Number of bacteriologically confirmed with TB among those tested with Xpert</td>
<td>19/262 (7%)</td>
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<tr>
<td>Number of DS-TB and RR-TB patients initiated on correct TB treatment from the diagnosed TB patients</td>
<td>18 DS-TB and 1 RR-TB</td>
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*Table 1: Mass screening results in Q3 of 2010 EC (Q1 2018)*

A total of 145 TB patients from the three HCs were enrolled on treatment in Q3 of 2010 E.C (Q1 2018) including the 19 (13%) patients identified during the one-week mass screening conducted by UHEWs. In Addis Ababa city, where initially only 3% of identified TB patients were registered, numbers gradually started to increase following the combined intervention, notably to 5% in Q2 and to 7% in Q3. This improvement at city level may be the spill-over effect of the combined intervention in the 3 woredas, as the approach and the results have been presented to all Woreda health offices and health facilities.
Lessons learnt

• This combined intervention clearly demonstrates the positive contribution UHEWs can have in finding the missing patients, via a house-to-house mass screening approach, improvement to the referral mechanisms to fast track referred patients and improving the recording and registration system linking the HC and UHEP systems.
• Committed coordination between the UHEWs supervisor and the TB focal person as well as regular supervision of the UHEWs was key.
• Following-up of UHEW’s referred patients, including cross checking with the relevant TB clinic records, helps to minimize the loss of referred patients.
• Such periodic targeted screening interventions are necessary to find missing persons with TB in slum areas and to raise awareness about TB. However when UHEWs TB control activities become more efficient and sustainable, these interventions could possibly become redundant.

Action taken to sustain the initiative

The Regional Health Bureau and Sub-Cities agreed to, routinely involve UHEWsin TB contact investigation, improve communication and collaboration between the health centres and the UHEWS, use the mass screening approach in other districts and to strengthen the monitoring system of UHEP.