Intensified TB Case Finding in Closed Settings

BACKGROUND

- TB thrives in the crowded, poorly ventilated environments found in prisons in many parts of the world. Conditions of prison life including malnutrition and inadequate or inaccessible medical care can contribute to a high risk of developing TB disease and poor treatment outcomes and resistance.
- Most prisoners are from marginalized, vulnerable populations with highly prevalent TB.
- Globally, TB case notification rates in prison are over 3,000 per 100,000 in high burden countries, far above the TB prevalence in the general population. TB mortality in prisoners is also in many settings.
- In Cambodia, the rate of active TB among prisoners was found to be seven times higher than the general population. Recently, prison occupancy has swelled resulting in severe over-crowding in most facilities.
- There are challenges ensuring quality TB prevention, diagnosis, and treatment due to difficulties in routine specimen transport, referrals for X-ray, referral tracking between prisons and post-release follow-up.

OBJECTIVE

To improve case detection and treatment and to close the diagnosis gap among prisoners

APPROACH

- Prison health post staff were trained to identify TB symptoms among inmates including new inmates through routine use of a standardized TB symptom screening check-list at entry for all new inmates.
- Contact investigation was conducted in cells of bacteriologically confirmed TB prisoners.
- Annual Active Case Finding using CXR and Xpert testing was conducted at prisons.
- All prisoners with a TB diagnosis were offered HIV testing on site.
- Severely ill presumptive TB patients who were Xpert negative were provided accompanied referral for CXR.
- Both seriously ill TB patients and those with HIV co-infection were referred for management and care at hospitals.
- Coordination was improved between the health post and prison officials to ensure that inmates were prepared for on-going TB treatment prior to discharge.
KEY ACHIEVEMENTS
- TB case notification rates in prisons declined from 5,175/100,000 in 2009 to 1,758/100,000 in 2016. However, prevalence remained 8 times higher than general population TB prevalence in 2016.
- The treatment success rate (TSR) was high, exceeding the national program TSR from 2015 to 2016.
- There were no TB deaths in the 10 supported prisons in 2015 and 2016.

209 health post staff and inmate cell chiefs
were trained on TB knowledge, sputum collection procedure and Directly Observed Treatment.

The Project helped detect...

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>2015</td>
<td>191</td>
<td>53%</td>
</tr>
<tr>
<td>2016</td>
<td>139</td>
<td>86%</td>
</tr>
<tr>
<td>2017</td>
<td>42</td>
<td>71%</td>
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</tbody>
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TB case finding in 10 prisons via Routine TB Activities and Active Case Finding

CONCLUSIONS
- Strengthen passive TB case finding coupled with annual mass TB screening using CXR for all inmates led to a rapid decrease in TB case notification rates in prisons.
- Active Case Finding using CXR as a screening tool provided higher yield of TB case notification than passive case finding.
- Follow-up of inmates still on TB treatment at release to the community with confirmation of continuation remained a critical challenge.

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- Provincial prisons
- Partner development organization
- USAID

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