Leprosy case detection through school survey: Post integration phase
India

Shibu George¹
V. Kanagasabapathy¹
Rajbir Singh¹
J. Ravichandran¹
G. Srinivas¹

¹ German Leprosy and TB Relief Association India
Introduction

- Children under 15 years constitute 30% of the Indian population
- Children <15 years enroll for schooling
  - School enrolment (% NER) for primary in 2010 = 98%
  - School enrolment for secondary (% NER) in 2010 = 58.3%
- In India, child leprosy contributes 10% of all new cases detected every year
- Ranges from 10.61% to 26.67% in different regions & endemic states
### Introduction

369 new cases every day in India of which 37 are children

<table>
<thead>
<tr>
<th>Year</th>
<th>New Cases Detected</th>
<th>ANCDR / 100,000</th>
<th>New Child cases</th>
<th>Child rate % (MB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td>126800</td>
<td>10.5</td>
<td>12463</td>
<td>9.83 (30.9%)</td>
</tr>
<tr>
<td>2011-12</td>
<td>127295</td>
<td>10.3</td>
<td>12305</td>
<td>9.70 (31.4%)</td>
</tr>
<tr>
<td>2012-13</td>
<td>134752</td>
<td>10.8</td>
<td>13387</td>
<td>9.93 (35.3%)</td>
</tr>
</tbody>
</table>
Introduction

- Till Leprosy was integrated in 2005, Annual school surveys was one of the key strategies for leprosy case detection

- School surveys also enabled easy accessibility and high coverage in shorter period which further contributes to early detection and prevention of disability

- After integration, the school survey has not been given priority
Introduction

During post integration phase, Government & NGOs continued awareness activities and encouraged voluntary reporting.

NGOs focused on school children to enhance their awareness and promote self-reporting for early detection.

This passive method has its limitations which result in late reporting of cases specially in rural areas.
However, large number of child cases are still being detected. **GLRA India therefore encouraged its Partner projects**

- To combine efforts on health education & screening school children
- Sensitization of teachers and involving school authorities
Schools across 14 locations chosen

9 are in high endemic districts
Method

An Innovative method that combined awareness creation and physical screening of students

• Entailed creating awareness among children & teachers

• Awareness talk in school assembly to disseminate the facts of Leprosy and dispel the myths

• Emphasize on educating school children about leprosy, its signs & symptoms

• Advised to examine their body for skin patch on the same day after returning home

• Sensitization to teachers to identify suspect skin patches
Method

• Physical screening of all children following day

• Self reported / suspected children were screened by trained supervisory staff

• Validated / diagnosed by Medical Officer including Nerve Function Assessment

• Initiated treatment or referred to nearest health centre

• Involving head of the school & teachers ease the task of treatment follow up
Results

✓ Data were analyzed from 14 partners (9 are in high endemic districts) located in 6 states for a period of 3 years 2010 to 2012 (481 schools)

✓ 584,120 students were screened for Leprosy

✓ 1,831 suspects with skin patch (self reported / found suspect during screening) were clinically examined

✓ 104 new cases of leprosy identified and put on treatment

✓ 89 cases completed treatment at the end of 2012 without new disability
### Profile of child cases

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of suspects</th>
<th>New cases</th>
<th>MB</th>
<th>Disability Gr. I</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>589</td>
<td>46</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>2011</td>
<td>722</td>
<td>31</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>2012</td>
<td>520</td>
<td>27</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1831</td>
<td>104</td>
<td>15</td>
<td>7</td>
</tr>
</tbody>
</table>

None of the children were found to be suffering from Grade II disability.
Innovative case finding methods need to be introduced to population groups who are vulnerable (Children) and at risk

The number of new child cases reported is important as it indicates presence of infection in the community and it implies a need for modified strategies to detect leprosy at an early stage.

While strengthening political commitment and mobilization of resources, it is also a need to adopt local problem specific strategies in endemic states/districts to address factors complimenting reduction of leprosy burden in the world.
Conclusion

 ✓ Involvement of teachers helps to sustain suspect referrals over years and may reduce stigma associated with disease

 ✓ Early detection and treatment remain the key strategy in reducing disease burden due to leprosy and also reduces the risk of transmission to healthy individuals

 ✓ Annual school survey yielded considerable new cases of leprosy in addition to raising awareness among younger generation.

 ✓ Leprosy case detection among children can be done along with routine school health check up campaigns in integrated scenario and as part of health for all
Acknowledgement

14 partner NGOs & GLRA India Team