Low Cost Extended Contact Survey for Leprosy

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New case detection static since 2008

Proportion Gr 2 increasing 2007

Proportion MB static all trough

Some pocket areas continued to have excess cases, some have a few only
Gaibandha is one of the high endemic districts of Bangladesh leprosy prevalence are > 1/10,000
Background

Gaibandha & Nilphamari remained endemic (> 1/10,000 cases) since 1985
Deformity Gr 2 is always > 5% among new cases
Population having very low SES
Leprosy programme implemented by NGOs
Mode of case detection under NLEP-Passive
Objective
Assess an extended contact survey methodology in high burden area;
  To find out new cases
  To document the cost involved
  To evaluate the GoB and NGO collaboration in the process
Gaibandha District
Area: 2179 km²
- Number of Upazila: 7
- Number of Unions: 82
- Number of villages: 1,103
- Total Population: ~2.5 million

Black spots indicate index cases
Contact survey method

• Mapping of registered patients location
• Identification of villages and means of communications
• Number of spots for survey: 50
• Duration of survey: 1 day at each spot
• Formation of survey team (7 teams, one for each sub district)
  – Each team consists of
    Leprologist 1, Medical Officer 1, LCO/LCS 1, LCA 1, Lab tech 1, Health Inspector 1, Sub district health administrator 1, Female volunteer 1
  Participation from both GoB and NGO
Contact survey method (Contd_)

- Orientation of team members on survey and data collection procedures
- Communication with village leaders & fixing survey date
- Visit neighboring households (~100 m) & examine members
- Smear examination of clinical MB cases
- All diagnosed cases put under MDT
- Socio demographic & disease information recorded on treatment card
Results
Index and New cases

- Registered patients included: 268 in 50 spots
- Population screened: 48,708
- Number of persons engaged in survey: 64
- New Leprosy patient detected during survey: 120
- Deformity Grade 2: None
- Suspect identified and under observation: 109*

*5 cases were confirmed on follow up
Distribution of New Cases

- Total new leprosy case detected: 120
- MB %: 25 (22.5%)
- PB %: 95 (77.5%)
- Male patient: 51 (Child 2)
- Female patient: 69 (Child 6)
- Male /female ratio: 0.7
Operating cost for contact survey

<table>
<thead>
<tr>
<th>Line items</th>
<th>BDT</th>
<th>USD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resources</td>
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<td></td>
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<tr>
<td>(Experts and supporting staff)</td>
<td>210,000</td>
<td>2698</td>
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<tr>
<td>Training</td>
<td>170,000</td>
<td>2152</td>
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<tr>
<td>Travel</td>
<td>41,600</td>
<td>527</td>
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<tr>
<td>Miscellaneous</td>
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<td>767</td>
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<td>(Materials, fax, phone, others)</td>
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<tr>
<td>Total</td>
<td>4,82,000</td>
<td>6144</td>
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</table>

* 1 USD = 79 BDT
Cost in routine case detection

Period: 1 month (During same month & in same area 2012)

• New cases detected: 10
• Persons involved: 24
• Number of suspects: 12
## Routine case detection cost

<table>
<thead>
<tr>
<th>Line items</th>
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<tbody>
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<td>(Experts and supporting staff)</td>
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<tr>
<td>Training</td>
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<tr>
<td>Travel</td>
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<td>Miscellaneous</td>
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<td>126</td>
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<td>(Materials, fax, phone, others)</td>
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<tr>
<td>Total</td>
<td>250,000</td>
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Relative cost in contact survey and routine case detection

<table>
<thead>
<tr>
<th></th>
<th>Contact survey</th>
<th>Routine case detection</th>
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</thead>
<tbody>
<tr>
<td>Total case detected</td>
<td>120</td>
<td>10</td>
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<tr>
<td>Suspect identified</td>
<td>109</td>
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<tr>
<td>Cost per case detection</td>
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<td>BDT 25,000</td>
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<td></td>
<td>USD 51</td>
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<td>Cost per case &amp; suspect</td>
<td>BDT 1138</td>
<td>BDT 11,364</td>
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<td>detection</td>
<td>USD 14.5</td>
<td>USD 144</td>
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</table>
Conclusion

12 times more cases (120 vs. 10) detected than routine activities
Cost of case detection under contact survey 6 times lower than routine activities
Cost of suspect detection under contact survey 10 times lower than routine activities

Contact survey can be organized within short time with minimal preparation
Possible due to excellent GoB and NGO collaboration
Strong Policy level commitment needed (DGHS, CDC, NLEP)