Integration of leprosy control with primary health care

S. N. MALLICK
Netherlands Leprosy Relief, Ranchi, India

Accepted for publication 10 January 2003

Introduction

The area of Bihar/Jharkhand has had a high incidence of leprosy for a very long time. The area remains a major endemic focus for the disease, both in the national as well as global context. Together, the two states account for about 30% of the India’s leprosy load in terms of registered prevalence of the disease.

The National Leprosy Eradication Programme (NLEP) currently being implemented by the national and state governments to control/eliminate the disease has gathered momentum since the late 1990s, which is later than in other parts of the country. The programme was conducted through a vertical set-up where NLEP staff were employed to carry out all leprosy elimination activities. In spite of major successes achieved in the programme, it became clear that it was not feasible to cover the entire state or country on a sustainable basis through the vertical structure alone, because of the costs involved and the weaknesses of the infrastructure (Table 1) and various other reasons. This is how the concept of integration has developed, which involves incorporation and integration of leprosy/multidrug therapy (MDT) services into the General Health Care Services (GHCS) for effective sustainable coverage throughout the year.

The state of Jharkhand, with 2.6% of India’s population, accounts for nearly 10% of the caseload. Nearly 25,000–30,000 new cases of leprosy are detected or reported in the state annually. Therefore, the problem is indeed a serious one and requires vigorous coordinated efforts and an integrated approach to combat the disease and achieve elimination targets at state, district and Block levels in terms of eliminating the disease as a public health problem.

Integration

Without doubt, integration is the only answer for the smooth future management of leprosy control, but it should be a gradual process. At the same time it also has some negative aspects: the quality of care may deteriorate, records and reports will be affected, there will be more

Correspondence to: S. N. Mallick (e-mail: nlranchi@sify.com)
Integration of leprosy control with primary health care

Table 1. Status of hospitals and HSC after 6 months of integration (study in nine districts of Jharkhand State). E = existing, F = functioning

<table>
<thead>
<tr>
<th>Districts</th>
<th>Sadar Hospital</th>
<th>Sub-division hospital</th>
<th>Referral hospital</th>
<th>HSC</th>
<th>Additional PHC</th>
<th>PHC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E</td>
<td>F</td>
<td>E</td>
<td>F</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>Hazaribagh</td>
<td>1</td>
<td>2</td>
<td>204</td>
<td>20</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>Chatra</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>96</td>
<td>35</td>
<td>8</td>
</tr>
<tr>
<td>Koderma</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>62</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Giridih</td>
<td>1</td>
<td>2</td>
<td>154</td>
<td>96</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Palamu</td>
<td>1</td>
<td>1</td>
<td>270</td>
<td>20</td>
<td>28</td>
<td>5</td>
</tr>
<tr>
<td>Garhwa</td>
<td>1</td>
<td>1</td>
<td>99</td>
<td>10</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Dhanbad</td>
<td>1</td>
<td>2</td>
<td>141</td>
<td>45</td>
<td>28</td>
<td>20</td>
</tr>
<tr>
<td>Bokaro</td>
<td>1</td>
<td>1</td>
<td>116</td>
<td>45</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Ranchi</td>
<td>1</td>
<td>4</td>
<td>502</td>
<td>100</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>None</td>
<td>17</td>
<td>158</td>
<td>47</td>
<td>96</td>
</tr>
</tbody>
</table>

re-cycling, and NLEP workers may tend to relax if they feel that someone else is dealing with the problem.

To combat these potential problems, the following should first be set in place:

- All additional Public Health Centres (PHC) and Health Sub-Centres (HSC) should be functioning, not on paper only. In Jharkhand State, we found that most of these are very irregular. A report can be seen in Table 2. This is the situation in service points after 6 months of integration.
- A simplified format should be used for maintaining records (Table 3). This responsibility should be handed over to PHC staff very carefully.
- One-day refresher training for all Medical Officers and PHC staff at an interval of 3 months for a minimum of 2 years.
- Vertical staff (NLEP) should be posted, not deputed, under the direct control of the PHC and have fixed responsibilities.

Table 2. Status of hospitals and HSC after 12 months of Integration (study in nine districts of Jharkhand State). E = existing, i.e. sanctioned by Government, F = functioning, i.e. with NLEP activities

<table>
<thead>
<tr>
<th>Districts</th>
<th>Sadar Hospital</th>
<th>Sub-division hospital</th>
<th>Referral hospital</th>
<th>HSC</th>
<th>Additional PHC</th>
<th>PHC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E</td>
<td>F</td>
<td>E</td>
<td>F</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>Hazaribagh</td>
<td>1</td>
<td>2</td>
<td>204</td>
<td>187</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>Chatra</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>93</td>
<td>67</td>
<td>8</td>
</tr>
<tr>
<td>Koderma</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>62</td>
<td>37</td>
<td>5</td>
</tr>
<tr>
<td>Giridih</td>
<td>1</td>
<td>2</td>
<td>154</td>
<td>86</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Palamu</td>
<td>1</td>
<td>1</td>
<td>270</td>
<td>151</td>
<td>28</td>
<td>21</td>
</tr>
<tr>
<td>Garhwa</td>
<td>1</td>
<td>3</td>
<td>99</td>
<td>88</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Dhanbad</td>
<td>1</td>
<td>3</td>
<td>141</td>
<td>100</td>
<td>28</td>
<td>23</td>
</tr>
<tr>
<td>Bokaro</td>
<td>1</td>
<td>2</td>
<td>116</td>
<td>116</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Ranchi</td>
<td>1</td>
<td>4</td>
<td>502</td>
<td>300</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>6</td>
<td>17</td>
<td>158</td>
<td>126</td>
<td>96</td>
</tr>
</tbody>
</table>
Table 3. Master Register (Patient Registration, Treatment and RFT Register) (essential instrument in leprosy elimination at PHC containing patient data and disease status). SC = schedule cast, ST = schedule tribe, SSL = single skin lesion

<table>
<thead>
<tr>
<th>SL no.</th>
<th>MDT No.</th>
<th>Name and address in detail</th>
<th>Age</th>
<th>Sex (M/F)</th>
<th>Case (TS/SC)</th>
<th>Type (M/B/BSL)</th>
<th>Mode of detection</th>
<th>Deformity (G1/G2/G3)</th>
<th>Date of starting MDT</th>
<th>Expected date of RFT</th>
<th>Exact date of RFT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Right page)

<table>
<thead>
<tr>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>23</th>
<th>24</th>
<th>25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of pulses (mention date)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>Remarks</th>
</tr>
</thead>
</table>

When the vertical system is abandoned, the situation at Medical College Hospitals, District Hospitals and Sub-Divisional Hospitals should be considered carefully, otherwise leprosy patients might suffer because of a possible gap. Most defaulters and recycling after relapse from treatment (RFT) come from these health facilities.

NLEP staff should be trained as multipurpose workers.

**Strategy**

Integration should be a slow process, which can be divided into three phases. There should be good planning at all levels (State level, District level, PHC level and HSC level). Clear-cut directives with job responsibilities should be issued from all levels to subordinates. A clear-cut and planned directive can solve most problems, which usually arise at the beginning. Good supervision and monitoring systems should be planned according to these directives.

**Initial phase (slow integration)**

In the first phase, the integration process should be gradual with less responsibility given to PHC staff.
ROLE OF CIVIL SURGEON

- To issue good administrative directives and circulars regarding integration.
- To transfer vertical staff (NLEP) to PHC (under the direct control of the Medical Officer in Charge).
- Ensure regular monitoring of NLEP activities.
- Review NLEP activities in monthly meetings.

ROLE OF MEDICAL OFFICER IN CHARGE OF PHC

- Diagnosis and classification of leprosy patients in the outpatient department (OPD).
- Register the case in the OPD register and start treatment with MDT by giving the first dose from PHC and transfer the case with case card to the nearest HSC (auxiliary nurse-midwife or basic health worker), which will continue the treatment.
- Regular monitoring of NLEP activities.
- Monthly review of NLEP activities.
- Submission of monthly report of entire PHC, including HSC, to District Leprosy Officer.

ROLE OF PHC STAFF

- Continue treatment of cases with MDT (second dose onward) and enter in the Master Register (Patient Registration, Treatment and RFT Register) at PHC headquarters on meeting date.
- Suspect leprosy cases and refer them to Medical Officer for diagnosis and classification.
- Maintain stock of drugs at PHC, additional HSC or HSC.

ROLE OF NLEP STAFF

- Register the case in Master Register (Patient Registration, Treatment and RFT Register) and train PHC staff to do the same.
- Prepare case cards (patient card) and identity card and train PHC staff to do the same.
- Release from treatment after fixed duration therapy (FDT) 6 pulses in 9 months for paucibacillary (PB) and 12 pulses in 18 months for multibacillary (MB) cases and to train PHC staff to do the same.
- Identify any complication and manage, in consultation with Medical Officers in charge of PHC or leprosy control units (LCU), the district technical support team and the District Leprosy Officer.
- Advise patient in self-care activities.
- Drug supply management for HSC or drug distribution point.
- Collect patient card and up-date Master Register in monthly meeting of PHC.
- Prepare the monthly report and train PHC staff to do the same.
- Visit all HSC and drug distribution points each month.
- Retrieve absentee cases.
- Plan awareness activities in remote or outreach areas.
- Contact examination.

Intermediate phase (real integration)

In the second phase, more responsibilities should be given to PHC staff.
ROLE OF CIVIL SURGEON

- Reminders of administrative directives and circulars regarding integration.
- Regular monitoring of NLEP activities.
- Review NLEP activities in monthly meeting.

ROLE OF MEDICAL OFFICER IN CHARGE OF PHC

- Diagnosis and classification of leprosy patients in the daily OPD.
- Identify one suitable auxiliary nurse-midwife, basic health worker or lady health visitor to share responsibility of NLEP work at PHC headquarters.
- Register the case in OPD register and start treatment with MDT by giving the first dose from PHC and transfer the case with case card to the nearest HSC (auxiliary nurse-midwife or basic health worker), which will continue the treatment.
- Regular monitoring of NLEP activities.
- Monthly review of NLEP activities.
- Submission of monthly report of entire PHC including Sub Centers to the District Leprosy Officer.

ROLE OF PHC STAFF

- Register the case in Master Register (Patients Registration, Treatment and RFT Register) at PHC.
- Prepare case cards (patient card) and identity card.
- Release from treatment after FDT 6 pulses in 9 months for PB and 12 pulses in 18 months for MB cases.
- Continue treatment of cases at HSC level with MDT (second dose onward) and enter in the Master Register (Patients Registration, Treatment and RFT Register) at PHC headquarters on meeting date.
- Advise patient in self-care activities.
- Collect patient card and update Master Register in monthly meeting of PHC.
- Suspect leprosy cases and refer them to Medical Officer for diagnosis and classification.
- Contact survey (auxiliary nurse-midwife or basic health worker)
- Maintain stock of drugs at PHC, additional PHC or HSC.

ROLE OF NLEP STAFF

- Identify any complication and manage in consultation with Medical Officers in charge of PHC and LCU, the district technical support team and the District Leprosy Officer.
- Drug supply management for HSC or drug distribution point.
- Prepare the monthly report and train PHC staff to do the same.
- Visit all HSC or drug distribution points each month to assist NLEP activities.
- Retrieve absentee cases.
- Plan awareness activities in remote and outreach areas.
- Train the PHC staff for prevention of disability (POD) and to identify complications.

FINAL PHASE (FINAL INTEGRATION)

In this phase, the NLEP staff will hand over all the NLEP activities to the PHC staff and will do supportive supervision only.
ROLE OF CIVIL SURGEON

- Regular monitoring of NLEP activities
- Review NLEP activities in monthly meeting.

ROLE OF MEDICAL OFFICER IN CHARGE OF PHC

- Diagnosis and classification of leprosy patients in the daily OPD.
- Identify one suitable auxiliary nurse-midwife, basic health worker or lady health visitor to share responsibility of NLEP work at PHC headquarters.
- Register the case in OPD register and start treatment with MDT by giving the first dose from PHC and transfer the case with case card to the nearest HSC (auxiliary nurse-midwife or basic health worker), which will continue the treatment.
- Regular monitoring of NLEP activities.
- Monthly review of NLEP activities.
- Submission of monthly report of entire PHC, including HSC, to District Leprosy Officer.

ROLE OF PHC STAFF

- PHC staff will take over all the NLEP activities mentioned above (for PHC and NLEP staff) by the end of third year.

ROLE OF NLEP STAFF

- Supportive supervision of NLEP activities in the whole block (PHC).
- Retrieve absentee cases.
- Plan for awareness activities in remote and outreach areas.
- Train the PHC staff for POD and to identify complications.
- As well as these duties, to serve as multipurpose workers.

Conclusion

The strategy for integration is based on the anticipated problems in India especially in the scenario of Jharkhand and Bihar state, where there is a poor of health infrastructure. It may be suitable for other states/countries.

In Jharkhand state, the integration process was started 1 year ago, but progress was very slow in the beginning. However, when we implemented the above strategy in the state, we found there was a dramatic change in integration process due to the clear-cut directive issued by state programme officer, and good supervision and monitoring at all levels by the higher officials, WHO consultants, district technical support team members, district programme officers and Medical Officers in charge of PHC.

The status of integration after 6 months of implementation is shown in Table 1. It shows that integration process was slow initially, effective only in rural areas and negligible in urban areas.

After 12 months of implementation of integration, the progress in the state was considerably improved, as shown in Table 2.