Chemoprophylaxis with Single-Dose Rifampicin for Contacts of Patients with Leprosy: An Operational Study in Sampang, Indonesia

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Outline of presentation

• Introduction
• Objective
• Methods
• Results
• Conclusions
INTRODUCTION

• No effective vaccine available
• Current control strategy – MDT – not effective enough
• Transmission starts (long) before diagnosis
• Evidence of continuing transmission in many districts in Indonesia.
Definition:
Giving a single prophylactic dose of antibiotics to contacts of leprosy patients
=> treatment of sub-clinical leprosy
Benefit of chemoprophylaxis
(according to previous studies)

<table>
<thead>
<tr>
<th></th>
<th>Effectiveness</th>
<th>95%CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>63%</td>
<td>20-83</td>
</tr>
<tr>
<td>Number needed to treat to prevent 1 case</td>
<td>116</td>
<td>53-627</td>
</tr>
<tr>
<td>Benefit per 1,000 persons</td>
<td>9</td>
<td>0-19</td>
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OBJECTIVES

General Objective:
To assess the operational conditions necessary for a single-dose rifampicin chemoprophylaxis (SDRC) intervention to be implemented in the National Leprosy Programme in order to reduce the new case detection rate.
Specific Objectives:

1. To achieve 80% coverage among contacts of new leprosy patients with SDRC under field conditions.
2. To assess any barriers to SDRC implementation in Sampang District.
3. To develop operational guidelines for the implementation of SDRC in the field.
Study Location:

- Sampang District, Madura island, East Java
- Population: 837,275
- Health Centers: 21
- Villages: 186
- 500-700 new patients every year
METHODS (2)

Activities Undertaken:

1. Finding new cases through RVS or contact exam.

2. Identifying and listing potential contacts: 1) households members, 2) nearby neighbors, 3) social contacts

3. Physical examination of contacts and community by health workers

4. Obtaining informed consent, interviewing contacts concerning exclusion criteria, giving the single dose of chemoprophylaxis

5. In-depth interviews and focus group discussions among person affected by leprosy, contacts, community leaders and health workers undertaken to assess barriers
METHODS (3):

Target:
At the beginning of implementation:
• Index case 2011 and 2012 = 1,076
• 20 contacts per index case (household members, nearby neighbours, social contacts)
• Chemoprophylaxis given during rapid village survey and routine contact examination

• Each contact takes rifampicin during the first and third year
• Chemoprophylaxis coverage was quantified
• Qualitative study to identify socio cultural factors affecting implementation.
1. Identifying potential contacts
2. Physical examination
3. Obtained informed consent

Taking the medicine
4. Implementation of in-depth interview

Target
• Community leaders
• Village officials

• Health cadres
• Head of Health Centres
• Leprosy workers
## RESULTS (1)

<table>
<thead>
<tr>
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<th>2011 &amp; 2012 cohort</th>
<th>2013 cohort (Aug 13)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Index Case Enrolled</td>
<td>1,076</td>
<td>219</td>
<td>1,295</td>
</tr>
<tr>
<td>No. Index Case screened</td>
<td>928 (86.2% of all IC)</td>
<td>40 (18% of all IC)</td>
<td>968 (74% of all IC)</td>
</tr>
<tr>
<td>No. Contacts screened</td>
<td>20,569</td>
<td>711</td>
<td>21,280</td>
</tr>
<tr>
<td>No. Contacts give chemoproph</td>
<td>19,419 (94.4%)</td>
<td>675 (94.5%)</td>
<td>20,094 (94.4%)</td>
</tr>
<tr>
<td>No. Contacts excluded</td>
<td>1,150</td>
<td>36</td>
<td>1,186</td>
</tr>
<tr>
<td>Reason to excluded: Untraced</td>
<td>233 (20%)</td>
<td>5 (13.8%)</td>
<td>238 (20.1%)</td>
</tr>
<tr>
<td>In other Rifampcin Therapy</td>
<td>47 (3.2%)</td>
<td>1 (2.7%)</td>
<td>48 (4%)</td>
</tr>
<tr>
<td>Suspect for TB</td>
<td>27 (2.3%)</td>
<td>-</td>
<td>27 (2.3%)</td>
</tr>
<tr>
<td>Refused</td>
<td>63 (5.4%)</td>
<td>-</td>
<td>63 (5.4%)</td>
</tr>
<tr>
<td>Pregnant</td>
<td>74 (6.4%)</td>
<td>4 (11.8%)</td>
<td>78 (6.6%)</td>
</tr>
<tr>
<td>Leprosy Suspect</td>
<td>7 (0.6%)</td>
<td>4 (11.8%)</td>
<td>11 (0.9%)</td>
</tr>
<tr>
<td>Others (incl. working outside survey area)</td>
<td>699 (60.2%)</td>
<td>22 (61%)</td>
<td>721 (60.8%)</td>
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</tbody>
</table>
RESULTS (2)

Issues encountered:
• Decreased motivation of health workers (HW) after the initial campaign phase,
• HW being overburdened
• Problems with informed consent
• Problems with disclosure, and discrimination following disclosure
• HW not using the term ‘leprosy’ during health education or counseling with patients or contacts
CONCLUSIONS

• Chemoprophylaxis well accepted by index cases, contacts, community members, health workers and local leaders
• Implementing chemoprophylaxis in routine district health programme is possible, embedded in contact examination
• Implementation policy should give specific attention to leprosy-related stigma, in particular to informed consent, confidentiality and disclosure.