“LEPROSY EPIDEMIC” IN A RURAL SRI LANKAN COMMUNITY

Consequences of neglecting neglected diseases

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Background

• Sri Lanka is an island in South Asia with a population of 20 million
• It is a lower middle income country with health indicators on par with many developed countries of the region
• A well developed public health infrastructure and a free health system with 100% coverage are thought to be responsible for these indicators
• Sri Lanka is divided into 9 provinces and subdivided into 25 districts for administrative purposes
Leprosy Control in Sri Lanka

• History of leprosy related activities in Sri Lanka dates back to Dutch colonial era in 17th century
• Anti Leprosy campaign was established in 1954 to plan, implement, coordinate and evaluate leprosy control activities
• A successful social marketing campaign in 1990 helped Sri Lanka to reach the Leprosy Elimination Target of WHO in 1995 (less than 01 case per 10000 population)
• In 2001, Leprosy control activities were integrated with the general health services
• Each year around 2000 new patients are detected
• New case detection rate is around 10 per 100000 population for the past 10 years
• Multibacillary rates are increasing (48% in 2011)
• Child rate is 10% and grade 2 deformity rate is 7% in 2011
• Number of new cases reported in some districts are on the increase
• Displacement of the population due to civil conflict has contributed to the increase in some areas (esp Puttalm District)
Sri Lanka Conflict & Post Conflict

- Sri Lanka experienced a civil conflict for three decades
- There was conflict driven population displacement from the Northern part of the country
- The Liberation Tigers of Tamil Elam (LTTE) drove out all the Muslims in North in 1992 giving them just 24 hrs to leave the area
- Puttlam district in the North-western part of the country was the residence for 30,000 displaced since then
- Following the end of war, majority returned to their former homes but some remain in Puttlam District
Map of Sri Lanka

Puttalam District
Background to the Survey

- In 2012 an increasing number of leprosy cases were reported at the dermatology clinic at the Base Hospital, Puttlam.
- The alerted public health staff conducted field clinics in the displaced settlement called Thambapanni in Puttlam and detected 30 cases.
- A decision was made to do a house to house survey among this Muslim community of 166 households.
Survey Methods

• An interviewer administered questionnaire and a clinical examination instrument were designed after consulting the Indian instrument used in the recently concluded Indian survey.

• Newly graduated doctors were used as field assistants together with public health inspectors, public health midwives and volunteers who visited houses in small teams of five health workers.
Screening tests for NCDs such as blood pressure measurements, random blood tests for glucose and measurements of height and weight (for BMI calculations) done to maximize the use of house to house medical check-ups.
• Informed written consent was taken from participants
• At least one fluent Tamil speaking member of health services present in a team
• Two female community members were included in the team who helped in the examination of female participants by the Public Health Midwife
• In total six visits by the teams to the community that comprised of 12 days of survey and six field clinics to confirm the diagnoses were conducted
• Friday afternoons and Saturdays were selected for the visits as the people are staying in their homes after Friday prayers
• Patients with confirmed diagnoses were issued the first pack of MDT and referred to the dermatology clinic at Puttlam Hospital for follow up.
• Others in whom the diagnosis was not confirmed were referred to the Dermatology clinic for confirmation.
• Data collected were entered in a computerized database at the Regional Directorate of Health, Puttlam
## Results

<table>
<thead>
<tr>
<th>No of Households</th>
<th>No of people screened</th>
<th>Number of Children below 15 examined</th>
<th>Number of adult males examined</th>
<th>Number of adult females examined</th>
<th>Number persons absent at the time of survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>166</td>
<td>939</td>
<td>335</td>
<td>290</td>
<td>314</td>
<td>165</td>
</tr>
</tbody>
</table>
Results contd...

<table>
<thead>
<tr>
<th>No of Leprosy patients detected</th>
<th>Children &lt; 15</th>
<th>No of Female patients</th>
<th>No with grade 2 disability</th>
<th>No with MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>30</td>
<td>23</td>
<td>01</td>
<td>01</td>
</tr>
</tbody>
</table>
People and Leprosy

- % no leprosy: 92.5
- % with Leprosy: 7.5

N = 936

Households and Leprosy

- % with no patients: 71.5
- % At least 1 patient: 20
- % > 1 patient: 5
- % 1 adult/child: 3.5

N=166
No with BMI > 25 of >15 year population (n=604)

157 (26%)

Systolic BP > 140mmHg in adults over 35 years (n=326)

84 (25%)

No with RBS > 200mg/dl in adults over 35 years (n=326)

20 (6%)
Discussion

• Even low infectious disease such as leprosy could reach “epidemic” proportions
• It shows conclusively the vulnerability to disease among displaced people due to civil unrest
• The survey depicts the consequences of *neglecting* neglected diseases amidst other health, political and social priorities
Acknowledgement

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THANK YOU