Restoring sight and the quality of life of children in Tanzania and Madagascar

Kilimanjaro Centre for Community Ophthalmology
Objectives of the work

- Identify children in need of surgical services and ensure they receive needed services
- Determine the cost of paediatric cataract surgery in an African setting
- Test different approaches to find/refer children in Tanzania
- Prepare and publish manual on use of KI in Africa
Objectives of the work

• Establish Child Eye Health Tertiary Facility (CEHTF) in Madagascar
  – Training & equipment
  – Establish community based case finding programme
• Decentralize community based efforts in identification and referral
• Reprint (and French language translation) of “Childhood Cataract in Africa” manual
Key informant approach to finding children

- Key informants trained (1 day) to find children with severe vision loss
- 2 weeks later children brought to central site for examination
- Children in need of surgical (or low vision) services sent to CEHTF
- Focus on “backlog”
Tanzania

Number of children receiving cataract surgery

1st project period = 126 children

2nd project period = 22 children (1st year)
# Estimated costs per child

<table>
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<tr>
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<tbody>
<tr>
<td>Hospital: ward expenses</td>
<td>134.20</td>
</tr>
<tr>
<td>Hospital: surgical expenses</td>
<td>300.14</td>
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<tr>
<td>Hospital: follow up expenses</td>
<td>47.00</td>
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<tr>
<td>Patient expenses: direct costs</td>
<td>58.98</td>
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<tr>
<td>Patient expenses: indirect costs</td>
<td>17.48</td>
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<tr>
<td>Total</td>
<td>557.80</td>
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Proportion to total costs by type

- Salaries: 54%
- Transport, food, etc.: 24%
- Consumables: 22%
# Productivity of KI compared to HW

<table>
<thead>
<tr>
<th></th>
<th>KI</th>
<th>HW</th>
<th>Total</th>
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<tbody>
<tr>
<td>Number trained</td>
<td>197</td>
<td>63</td>
<td>260</td>
</tr>
<tr>
<td>Children identified</td>
<td>549</td>
<td>22</td>
<td>571</td>
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<tr>
<td>Productivity (children/ trainee)</td>
<td>2.78</td>
<td>0.35</td>
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Improved eye care services for children: Current & Planned sites (2009-2011)

Trainee countries

Nepal
Cambodia

Teaching Hospital, Antananariva
 Madagascar challenges

• Coup earlier this year
  – MoH staff changed
• Need to continue assessing approaches to “scale up”
• High myopia in children more common (than eastern Africa) and congenital cataract less common
• No other CEHTF
• Not all partners “on the same page”
• Setting up CEHTF going to require more mentorship
Working: bottom up and top down

Bottom-up

Top-down
Why are we investing in childhood cataract?

- Children have a lifetime ahead of them
- Impact on family and society huge
- Known strategies that work
- Although expensive...well worth it!

Alex Mallya, Age 7