Cataract Uptake: What limits service delivery?
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Blindness Situation in Bangladesh
- 1.53% of population over 30 years are blind
- 750,000 blind persons in the country
  - 600,000 due to cataract alone (80%)
  - 120,000 new cases/year
- 40,000 children blind; one third of them are due to cataract
(Ref: National Blindness and Low Vision survey 2000)

Causes of Blindness
- Cataract
- Childhood Blindness
- Corneal scarring (Infection and Trauma)
- Diabetic Retinopathy and ARMD
- Glaucoma

Service delivery: Infrastructure
- Government has the largest infrastructure
  (250 ophthalmologists, 300 MLOPs & 1500 hospital beds)
- NGOs are the largest performer
  (200 ophthalmologists, 400 MLOPs & 1000 hospital beds)
(Ref: Eye Care Capacity Assessment 2006)

Need for cataract surgery by Division
<table>
<thead>
<tr>
<th>Division</th>
<th>Cataract blind now</th>
<th>Cataract blind new</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dhaka</td>
<td>154,560</td>
<td>28,000</td>
</tr>
<tr>
<td>Chittagong</td>
<td>153,990</td>
<td>30,000</td>
</tr>
<tr>
<td>Rajshahi</td>
<td>150,120</td>
<td>30,000</td>
</tr>
<tr>
<td>Khulna</td>
<td>118,040</td>
<td>23,000</td>
</tr>
<tr>
<td>Barisal</td>
<td>99,300</td>
<td>20,000</td>
</tr>
<tr>
<td>Sylhet</td>
<td>49,560</td>
<td>10,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>602,480</td>
<td>120,000</td>
</tr>
</tbody>
</table>

Minimum number of additional cataract operations needed yearly to prevent backlog from increasing further

Current Performance
- 145,000 cataract surgery performed in 2007.
- CSR= 1000/million pop/year
- Performance Ratio between Gov. & NGO: 20:80
(Ref: National performance data 2007)
Required CSR 2500 for Bangladesh

- At least 2500 cataract surgeries /million pop/year to be performed in order to clear the cataract backlog within next 3 years.
- This translates to a total of 320,000 cataract operations annually
- This is also important to clear the backlog of a simple disease before other very sophisticated disease like DR and ARMD emerge. Otherwise, total blindness will increase further.

Cataract Surgical Rate in Various Countries

Factors Limiting Performance “Supply Side”

- Service is not located at the place where majority people live (80:20 divided rule)
- Half of the ophthalmologists do not practice surgery
- High cost of surgery (unit cost is higher due to lesser number)
- Equipment, IOLs and supplies are imported from other countries and, hence, are expensive

Factors Limiting Performance “Supply Side”

- Government does not provide financial support to NGOs who deliver most
- No supply of IOL and medicine at the government hospitals
- Hospitals do not set annual target for cataract surgery
- Too much of donor dependency

Factors Limiting Performance “Demand Side”

- Low awareness on the eye health
- High cost of service- affordability
- Inaccessibility- hospitals are not nearby
- Poor quality of surgical outcome
- No accompanying person for the blind
- Fear- too old/too young (pediatric cataract) to operate

Low output per eye doctor!
(250 surgery per ophthalmologists/year)

- Lack of case finding of cataract cases
- Lack of dedicated theatre for cataract surgery
- Lack of surgical instrument sets
- Lack of support staff for eye doctor
- Mindset of Ophthalmologists!!!
Barriers to surgery

- Two problems
  - The blind cannot see and stay at home
  - We stay in our clinics and do not see the blind!
- Barriers to surgery
  - A – Awareness (lack of)
  - B – Bad service
  - C – Cost
  - D – Distance
  - E – Expectation (lack of)

Solutions to low uptake by patients

<table>
<thead>
<tr>
<th>BARRIERS</th>
<th>SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A – Awareness (lack of)</td>
<td>Health education</td>
</tr>
<tr>
<td>B – Bad service</td>
<td>Monitor outcomes</td>
</tr>
<tr>
<td>C – Cost</td>
<td>Sx free/ subsidized</td>
</tr>
<tr>
<td>D – Distance</td>
<td>Outreach surgery</td>
</tr>
<tr>
<td>E – Expectation (lack of)</td>
<td>Health education</td>
</tr>
</tbody>
</table>

Some initiatives taken by ORBIS that are proven to be effective in reducing cataract blindness

- Linking eye care with micro-credit
- Introducing Health Insurance scheme for the poor
- Demand side financing in eye care- (this year WSD press release)

Thank You