Active screening and management of cataract, refractive errors and ROP

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Available facilities:
Comprehensive treatment, all specialty services, Vision, community centers, Managed eye hospitals, Teaching and training, Research, IOL manufacturing division,

A2Z Project service area
• Population 25 million

Madurai
Total Out patient  575,392
Annual surgeries  111,366
Aim and objectives of the project

Aim

To enhance the service delivery to the needy children

Objectives: three areas

- High quality surgical treatment to paediatric cataracts
- Increase the beneficiaries with refractive errors
- Implement screening and treatment for ROP in nearby NICUs
**Project approach - cataract surgery**

- **Towards case finding**
  - Special paediatric eye camps in under served areas
  - Incorporating paediatric eye care into our regular camps
  - Distribution of IEC materials (professionals) towards early referral

- **To increase the acceptance rate**
  - Offering a totally free service to the needy
  - Good counselling to the parents/guardians
  - General anaesthesia-improved techniques for sick children
  - Provision of financial assistance for follow-up visits

- **Towards Quality treatment**
  - Provision of Foldable lenses to all children, Increasing the follow up rate, Spectacles for the residual refractive error
Organizing a Paediatric eye camp

Planning - Geographical Information System (GIS)
- Identification of the potential area
- Selection of a local partner
- Fix the date and camp site
- Publicity with posters, pamphlets, mike systems
- Visit of a medical team
- Spectacle distribution on the spot
- Refer to base hospital for expert management
## Paediatric Eye Camps - performance

<table>
<thead>
<tr>
<th>Activity</th>
<th>Planned for 18 months (Oct 08- July 10)</th>
<th>Planned for 12 months (Oct 08- Sept 09)</th>
<th>Actual Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paediatric eye camps</td>
<td>14</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Children examined</td>
<td>4,800</td>
<td>2,800</td>
<td>2,040</td>
</tr>
<tr>
<td>Spectacles</td>
<td>800</td>
<td>500</td>
<td>561</td>
</tr>
</tbody>
</table>

### Challenges

- **Community Partners**

- **Screening children of 0 – 5 years**

**How challenges were met**

- **A2Z support for publicity and spectacles, training of anganwadi workers**
## Cataract Surgery Performance

<table>
<thead>
<tr>
<th></th>
<th>Total number planned (Oct 08- Sept 09)</th>
<th>Actual surgeries performed (Oct 08 – Sep 09)</th>
<th>Beneficiaries Under A2Z support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataract Surgery</td>
<td>1000</td>
<td>857</td>
<td>312 + 8</td>
</tr>
<tr>
<td>Foldable lens</td>
<td>300</td>
<td>531</td>
<td>220</td>
</tr>
<tr>
<td>G.A &amp; Surgery kits</td>
<td>500</td>
<td></td>
<td>438</td>
</tr>
</tbody>
</table>

### Challenges

Lack of awareness, late referrals, very sick babies, reaching them all at the same time conscious towards sustainability

### Overcome?

By paediatric eye camps, increasing the capacity of counselling, A2Z support for IOLs and other help
Finding Refractive errors-correction with spectacles

- Identification of School
- Training of teachers
- Organising the doctor’s examination
- Provision of spectacles on the spot.
## School Screening Performance

<table>
<thead>
<tr>
<th>Activities</th>
<th>Planned (Oct 08 - July 10)</th>
<th>Planned (Oct 08 - Sept 09)</th>
<th>Actual Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers trained</td>
<td>450</td>
<td>300</td>
<td>662</td>
</tr>
<tr>
<td>School screening Camps</td>
<td>70</td>
<td>40</td>
<td>67</td>
</tr>
<tr>
<td>Students screened</td>
<td>70,000</td>
<td>40,000</td>
<td>116,991</td>
</tr>
<tr>
<td>Spectacle distribution</td>
<td>4,400</td>
<td>2,400</td>
<td>4,338</td>
</tr>
</tbody>
</table>

### Challenges

- School Working Pattern - 220 days
- Working hours per day: 9.30 am to 4.30 pm
- Plastic lens dispensing

### Challenges overcome

- Systematic planning at base hospitals (weekly review meeting)
- Community participation (School management, teachers, local NGOs and parents)
- Letter sent to parents through teachers
- Acquiring the equipment (ESSILOR) and special training to staff to grind and dispense plastic lenses on the spot
Screening and treatment of ROP

- Selection of NICUs and getting approval from the concerned authorities
- Sensitising our own staff and the staff at NICU on the procedures
- Distribution of IEC materials
- Counselling on the available free services
- Follow up of affected infants with comprehensive workup

<table>
<thead>
<tr>
<th>Activity</th>
<th>Planned (Oct 08- July 10)</th>
<th>Planned (Oct 08- Sept 09)</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babies examined</td>
<td>500</td>
<td>270</td>
<td>542</td>
</tr>
<tr>
<td>Babies referred to AEH</td>
<td>45</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>ROP Laser procedures</td>
<td>90</td>
<td>50</td>
<td>47</td>
</tr>
</tbody>
</table>
Paediatricians getting trained to recognize ROP with simulated eye balls

- Problems and solution
- Entering the government sector for ROP screening
  - Participating in their teaching
- Organising a hands on for the paediatricians
- Getting the permission from the Dean
- HOD of their own ophthalmic unit admitting their inability to screen for ROP
Much has been done and
Much remains to be done

Thank You