Need & Functions of Eye Banks

Rotary Aravind International Eye Bank
Aravind Eye Hospital, Madurai
Need for Eye banking

- Corneal blindness - second frequent cause of blindness – 7% (APEDS)
- More pronounced in developing countries
- More economical burden to the society
- Remedy – corneal transplantation (keratoplasty)
Eye Banking in India

- Eye Banks in India (EBAI) - 200
- Active Eye Banks - 50
- Eye Banks and Eye Donation centres collecting more than 500 eyes per year - 10
State wise Eye collection

Gujarat - 4649
Tamilnadu - 4348
Maharashtra - 3319
Andhra Pradesh - 2200
Karnataka - 1190
Delhi - 1077

Zonewise collection of eyes

South Zone - 43%
(A.P, Kerala, T.N. Karnataka, Pondy)

West Zone - 41%
(Gujarat, Maharashtra)

North Zone - 11%
(Delhi, Punjab, Haryana, Rajasthan, Chandigarh)

East Zone - 3%
(W.B, Assam, Bihar, Orissa)

Central zone - 2%
(M.P, U.P)
# Statistics of Eye Collection in India

<table>
<thead>
<tr>
<th>Annual Requirement of Corneas</th>
<th>- 100,000</th>
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<tr>
<td>Current Procurement</td>
<td>- 22,000</td>
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<tr>
<td>Utilization</td>
<td>- 40% (8800)</td>
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Eye Bank setup

Decide your level of operation

Eye Collection center – where the operation is limited to publicity and eye collection

Eye Bank at National level – eye collection & processing

International Eye Banks – eye collection, processing, distribution and training
Accreditation

• International Eye Banks – International Federation of Eye & Tissue Banks, USA
• Local Eye Banks – Register Eye Bank Association of India (EBAI)
• Registered under Human Organ Transplant Act (HOTA) – State Government
Advantages of Accreditation

- Positive publicity
- Eligibility for funding by the Govt
- Training imparted by EBAI
- Participation in Seminars/Workshops
- Up gradation to Eye bank training centers
- Credibility among public leading to increased eye donations
Eye Banking - Legislation

  - Called Transplantation of Human Organs rules 1995
    - Only registered Medical Practitioners
    - Written Consent from the family
      - Next of kin
      - Witness (2)
Rotary Aravind International Eye Bank

Area

- 1000 sqft. eye bank lab site
- Centralized air condition
- U.V. irradiation facility for working area
- Lab sinks with filters
- Filing cabinets
Rotary Aravind International Eye Bank

Eye Bank Personnel
- Medical Director
- Administrator
- Technicians
- Social Workers
- Public relation officer
Eye Bank

- Public Awareness
- Tissue Harvesting
- Tissue Distribution
- Tissue Evaluation
- Tissue Preservation
Processing of donor tissue

Slit lamp Evaluation

Corneal excision

Serology Tests

Endothelial analysis
Performance of the Eye bank

- Number of eyes collected: 6487
- Number of eyes utilized: 2762
- Distribution: 5%
- Tissues not suitable for surgery are used for Research and Training
Strategies to promote eye donation

- Publicity
  - Posters, Pamphlets, newspaper articles, eye donation fortnight celebration

- Networking with Voluntary organisations
  (Lions and Rotary clubs)

- Hospital Cornea Retrieval
Video on Eye Banking
Facts about eye donation

- Eyes can be donated only after death
- Eyes must be removed within 6hrs of death
- A small amount (5ml) of blood will be drawn from the donor
- Eye retrieval does not cause disfigurement
- No religion is against eye donation
- Identity of the donor and recipient is not disclosed