# 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

Source: Eye Bank of Association (2002)

### Zonewise collection of eyes

South Zone

- 43%

(A.P,Kerala,T.N.Karnataka,Pondy)

West Zone

- 41%

(Gujarath, 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

Annual requirement

of corneas

- 100,000

Current procurement

- 22,000

**Utilization** 

- 40% (8800)

## 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

- Transplantation of Human Organs Act 1994 (Act no. 42 of 1994)
  - 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

Public Awareness

Tissue Harvesting

Eye Bank

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

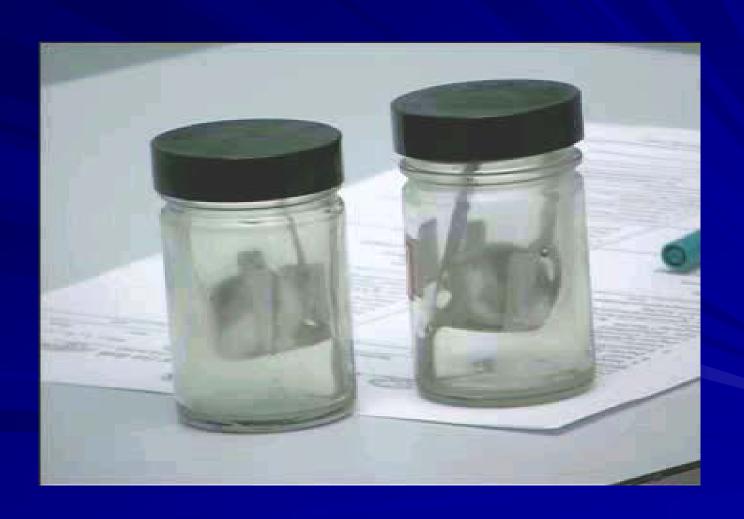
Distribution - 5%

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