

## ARAVIND EYE HOSPITAL

ANNUAL REPORT-1986



President Dr. G. VENKATASAMY, M.S., D.O., F.A.M.S.

Under the inspiration and organising potential of Dr. Venkataswamy, and staffed with competent and dedicated professionals, Aravind Eye Hospital is making a decisive difference in the blindness rate. The developments and the achievement reports of this year reinforce this conviction. With only 0.25% of the country's ophthalmic man power, Aravind accounts for over 2% of the cataract surgery done nationwide.

In 1986, Aravind continued to expand its eye care facilities with the opening of new hospitals and clinics. At the same time several research projects were initiated which have the potential of improving eye care delivery. These projects reflect Aravind's commitment to finding new ways to reduce the burden of needless blindness in Tamil Nadu.

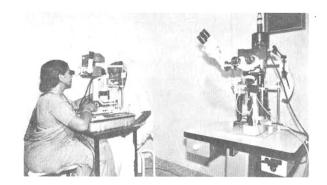
#### **DEVELOPMENTS 1986.**



 To facilitate the analysis of large amounts of data from research projects, a unix-based super micro computer with multiple terminals was installed in November 1986.



- With the appointment of a full time microbiologist Dr. Savithri Sharma, the microbiology lab established in 1985 became fully operational since June 1986. From June 1986 to December 1986, over 2600 specimens were processed for smear and culture examinations.



- A YAG laser-CILCO PV 135-was installed in October 1986. This is used in glaucoma surgery and for operating on the posterior membrane of the lens capsule of patients who have had Intra Ocular Lens implant.
- A second YAG laser (Coherent) was added in December 1986. This portable YAG laser is a prototype which has been sent to us for evaluation both in field and hospital use.
- 2 Operating microscopes (Zeiss OPMI-6S FC) were added to the existing range of operating microscopes.
- Aravind Eye Hospital at Theni opened 2 satellite out-patient clinics at Cumbum (on 10th September 1986) and Batlagundu (on 12th November 1986). These clinics function twice a week.
- The construction of the Aravind Eye Hospital at Tirunelveli is under way. This hospital when completed will have 200 beds of which 100 will be for free patients. A part of the building will be ready by June 1987 and the hospital is expected to begin functioning from then.

#### PATIENT LOAD SUMMARY FOR 1986

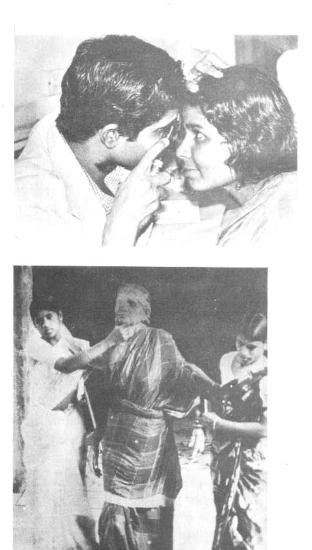
	Out patient Visits	Operations
Paying Patients		
Madurai	87,448	7,536
Theni	22,339	666
Sankarankoil	1,759	7
Free work		
Madurai	66,755	15,659
Camps	96,287	2,570
Theni		1,217
Maldives camp	1,935	. 177
Total	2,76,523 .	27,825

#### SURGERY STATISTICS FOR 1986



	Paying	Free	Total
1. Cataract and other lens			
removal procedures	4,567	16,838	21,405
2. Intra Ocular Lens (IOL)	1.139	529	1,668
3. Trabeculectomy	255	275	530
<ol><li>Retinal Detachment</li></ol>	165	3	168
5. Vitreous Surgery	126	33	159
6. Laser & Xenon Photo-			
coagulation	241	_	241
<ol><li>Membranectomy</li></ol>	79	28	107
<ol><li>Keratoplasty &amp; Therapeutic</li></ol>			
grafting	87	15	102
<ol><li>Squint correction</li></ol>	82	5	87
10. Ptosis and Plastic surgery	16	1	17
11. Pterygium	172	346	518
<ol><li>DCR, DCT, &amp; other septic</li></ol>			
operations	224	1,548	1,772
13. Others	1,049	2	1,051
Total	8,202	19,623	27,825





Nome of Agenesi	No. of	No. of	Operations done			
Name of Agency	camps	cases treated	Cataract	Others	Total	
1. Bhagwan Sri Sathya						
Sai Seva Organisation	39	12280	1684	72	1756	
2. Lions Club	44	16308	2112	61	2173	
<ol><li>Rotary Club</li></ol>	18	3861	341	6	347	
4. Vivekananda Kendra	75	14772	2135	95	2230	
5. Jaycees	1	193	24		24	
6. Others Agencies like						
Co-op banks, mills, etc	351	48873	5543	231	5774	
7. WHO at Maldives	1	1935	115	62	177	
Total	529	98222	11954	527	12481	

In 1986 we conducted 529 Eye Camps, treated 98,222 out-patients and operated 12,481 patients with the help of the following organisa-

Eye Camps

tions:

Of the total operations, 2747 were performed at the camp site itself while the others were transported and operated at our free hospitals either at Madurai or at Theni.



#### ARAVIND CHILDREN'S HOSPITAL

Two years old now, this hospital attracts more and more poor patients through its frequent paediatric camps conducted in the neighbouring villages. Over 90% of the hospital based care and the entire camp services including medicines are provided free.

There are 3 doctors, one nursing superintendent, 12 nurses, 2 child care workers, 2 social workers, 1 nutrionist, 1 pharmacist and administrative staff.

- Training in Paediatric Nursing is given at the hospital itself.
- Members of International voluntary agencies participate in the primary health care work done here.
- Health education is given to the mothers at the paediatric camps and at the Children's Hospital once a week.

#### ARAVIND CHILDREN'S HOSPITAL STATISTICS FOR 1986

Out-Patient Visits<br/>(Paying & Free)- 36,591In-Patients- 254Total No. of camps- 110Patients examined in camps- 11,085Immunisation given- 3,524

#### VISITORS

Ms. Emily Granger and Ms. Linda Llewellyn, nurses from England spent 6 months each at the Aravind Childrens Hospital as volunteers from Action Health 2000 – England.

Dr. Mukesh Kapila – Director – Action Health 2000 visited the hospital in January 1986, to coordinate the volunteers' activities here.

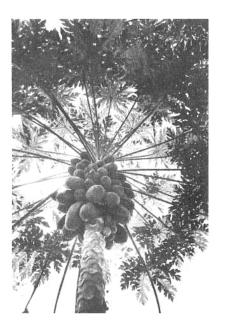
Dr. and Mrs. G. Klose from West Germany were at Aravind Children's Hospital for five weeks.

Dr. Arnold Reiner. paediatrician sponsored by Seva-USA was here for 3 months-setting up an education programme for mothers on oral rehydration therapy. Dr. Barbara Underwood of National Eye Institute-USA, Dr. Mrs. V. Rahamathullah of UPASI-INDIA, Dr. Saroj Pachauri of Ford Foundation, New Delhi, were here in May 86 to discuss the feasibility of having a research project on reducing childhood morbidity through small doses of vitamin A.

#### NUTRITION REHABLITATION CENTRE

Since January 1986, the Nutrition Rehabilitation Centre at Government Rajaji Hospital is managed by Aravind. This project is funded by the Royal Commonwealth Society for the Blind – UK.

## At the Nutrition Rehabilitation Centre



#### RESEARCH PROJECTS

#### a) Operations Research:

This three year project is designed to find the most cost effective way to encourage rural cataract patients to come for surgery. In 1986, the second year of the study, training material for all categories of field staff was developed, pretested and the first group of field staff were recruited. Previously operated cataract patients were trained as "aphakic motivators" to screen villagers for cataract and to do basic eye health promotion.

Special videotapes about the importance of cataract surgery were created to be shown at weekly markets. The work on the project involves collaboration between Aravind staff and colleagues at the Survey Research Centre (University of Michigan), University of Omaha and the National Eye Institute (USA). The following visited the hospital in connection with the project.

- Dr. M.I.D. Sharma-New Delhi-Epidemiologist
- Dr. Girija Brilliant-USA-Social Scientist
- Dr. James Lepkowski USA Statistician
- Dr. Richard Mowrey-National Eye Institute, USA-Bio Statistician
- Dr. Leon Ellwein Omaha, USA Consultant
- Mr. Robert Tilden Ann Arbor, USA Consultant



Awareness through Mass Media – Our Media van and technicians at a village market site explaining and examining the eligible persons.

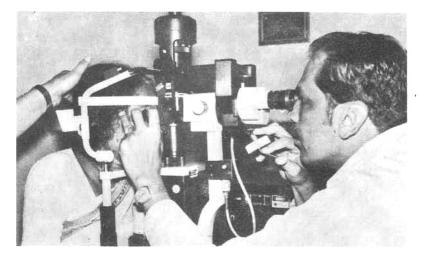


#### b) Rapid Survey Techniques for Ophthalmic Health Planning and Monitoring:

Funded by BOSTID (US), this project will develop and test a method for cataract diagnosis using para-professional health – workers and analysing the data on stand alone micro-computers.

During 1986, the study sample was selected and field staff were recruited and trained in a variety of data gathering tasks, from preparing detailed village maps to collecting household information.

#### Argon Laser



#### c) Laboratory and Clinical Studies of Eales' Disease

This project is now in its third year. This has been launched under the Indo-US Science and Technology Initiative, sponsored by Indian Council of Medical Research in collaboration with the Madurai Kamaraj University. This study is to establish the etiology of the disease and evaluate the combined treatment of Xenon photocoagulation and cryopexy. This project is funded by the National Eye Institute, Washington D.C., U.S.A.

- d) Management of Central Serous Retinopathy by Argon Laser photocoagulation— A randomised clinical study on suitable patients is being conducted.
- e) Management of Diabetic Maculopathy by Argon photocoagulation — After detailed investigations, patients are selected for this study. Focal and "grid" type of photocoagulation is done and the results are evaluated.

#### CONFERENCES ATTENDED:

 In January 1986 Dr. P. Namperumalsamy, Dr. G. Natchiar, Dr. M. Srinivasan and Dr. V.S. Rao attended the All India Ophthalmological Society conference at Kanpur.

Dr. P. Namperumalsamy gave "Dr. P. Siva Reddy Oration" on "Recent Advances in etiology and Management of Eales Disease"

He also participated in

- a) Symposium on Diabetes and the Eye
- b) Current Status Programmes:
  - 1. Pars Plana Surgery of the Posterior Segment
  - 2. Interpretation of Flourescein Angiogram
  - 3. Management of Perforating Injuries by Pars Plana Surgery.

Dr. G. Natchiar participated in current status programme in "Microsurgery of anterior segment".

 On 22 June 1986, Dr. P. Namperumalsamy participated in the Andhra Pradesh State Ophthalmic Conference held at Hyderabad and gave a lecture on

"Retinal Detachment --- What to do and when"

- The 34th Conference of Madras State Ophthalmic Association held at Pondicherry was attended by
  - Dr. P. Namperumalsamy Dr. Taraprasad Das
  - Dr. G. Natchiar Dr. Nagappan
  - Dr. M. Srinivasan
  - Dr. P. Vijayalakshmi

Dr. R. Maheswari Dr. V. Revathy and the following post graduates:

Dr. G. Sumathi	Dr. K. Kalamani
Dr. R. Mohan	Dr. P. Kanaga Durga
Dr. P. Lalitha	Dr. S. Janaki
Dr. A. Sundar	Dr. Imtiaz Ahmed Mekhri
Dr. S. Padmanaban	Dr. P. Pathmaraj
Dr. K. Krishnaram	

Dr. P. Namperumalsamy gave "Dr. Joseph Gnanadhickam Oration" on

- "Rhegmatogenous Retinal Detachment-Management"

He conducted a Symposium on Vitreous surgery.

He presented a paper on Role of Vitrectomy in Retinal Detachment.

Dr. G. Natchiar conducted

- a workshop on Intra Ocular Lens
- a symposium on advances in cataract surgery
- a quiz programme in ophthalmology for post graduate students and presented a paper on

- Anterior chamber Implants

Dr. M. Srinivasan presented papers on

- A new non-occupational Ocular Trauma
- Nocardial corneal ulcer
- Dr. P. Vijayalakshmi Extra Ocular Cysticercosis
- Dr. T. P. Das --- Ultrasonic Characterisation of Proliferative Vitreo Retinopathy

ONFERENC m S ATTENDE 

- Dr. Maheswari Astigmatism in relation to corneal wound suturing
- Dr. N. Nagappan-Experiences with Yag Laser
- Dr. V. Revathy Survey of Traumatic Optic Atrophy.
- Dr. M. Srinivasan attended a workshop on "Eye Banking and Keratoplasty" organised by the Karnataka Opthalmological society on 8th and 9th February at Bangalore.
- Dr. Natchiar attended the Paediatric Neuro Ophthalmology course at Hyderabad.
- At the Paediatric conference held at Madurai Medical College Dr. Natchiar presented papers on:
  - Congenital anamolies of the eye detected at birth
  - Importance of Neuro Ophthalmology in children
  - Dr. Vijayalakshmi presented a paper on
  - Importance of early detection of strabismus in children
- The third general assembly of International Agency for the Prevention of Blindness was held at New Delhi in December from the 6th to 11th

Dr. G. Venkataswamy Mr. G. Srinivasan Dr. P. Namperumalsamy Mr. R. D. Thulasiraj Dr. G. Natchiar from Aravind Eye Hospital attended.

- Dr. G. Venkataswamy chaired the session on "Magnitude of Blindness" and also presented a paper on "Community Participation in Prevention of Blindness".
- Dr. P. Namperumalsamy co-chaired one of the sessions and presented a paper on "Blindness due to Diabetic Retinopathy".



 Dr. G. Natchiar participated in a seminar in Neuro Ophthalmology conducted by Karnataka Ophthalmological society on 28th September 1986 at Bangalore. She spoke on:

"The role of visual fields in diagnosis of sellar and para sellar tumours"—This was also published in the journal "Neurology India"

- Dr. Maheswari Astigmatism in relation to corneal wound suturing
- Dr. N. Nagappan-Experiences with Yag Laser
- Dr. V. Revathy Survey of Traumatic Optic Atrophy.
- Dr. M. Srinivasan attended a workshop on "Eye Banking and Keratoplasty" organised by the Karnataka Opthalmological society on 8th and 9th February at Bangalore.
- Dr. Natchiar attended the Paediatric Neuro Ophthalmology course at Hyderabad.
- At the Paediatric conference held at Madurai Medical College Dr. Natchiar presented papers on:
  - Congenital anamolies of the eye detected at birth
  - Importance of Neuro Ophthalmology in children
  - Dr. Vijayalakshmi presented a paper on
  - Importance of early detection of strabismus in children
- The third general assembly of International Agency for the Prevention of Blindness was held at New Delhi in December from the 6th to 11th

Dr. G. Venkataswamy Mr. G. Srinivasan Dr. P. Namperumalsamy Mr. R. D. Thulasiraj Dr. G. Natchiar from Aravind Eye Hospital attended.

- Dr. G. Venkataswamy chaired the session on "Magnitude of Blindness" and also presented a paper on "Community Participation in Prevention of Blindness".
- Dr. P. Namperumalsamy co-chaired one of the sessions and presented a paper on "Blindness due to Diabetic Retinopathy".



 Dr. G. Natchiar participated in a seminar in Neuro Ophthalmology conducted by Karnataka Ophthalmological society on 28th September 1986 at Bangalore. She spoke on:

"The role of visual fields in diagnosis of sellar and para sellar tumours"—This was also published in the journal "Neurology India"

#### ACADEMIC PROGRAMMES

From this academic year, 1986–87, Aravind has been recognised for conducting M.S. (Ophthalmology) by Madurai Kamaraj University.

The fourth batch of 6 students passed the Diploma in Ophthalmology (D.O.) course of Madurai Kamaraj University in the examination held in March 1986.

The following doctors were here under the World Health Organisation fellowship:

Dr. Pravat Tungsripat : Thailand Dr. Panom Sanit Prachakorn : Thailand

In 1986 the following residents from Illinois Eye & Ear Infirmary, Chicago and St. Vincents' Hospital in New York city came to Aravind for four weeks as part of their residency programme.

The residents from Illinois Eye & Ear Infirmary, Chicago were:

Dr. (Ms.) Joan Morton Dr. Ann William Dr. Alan Kimura Dr. Doug William Dr. Peter Panton

from St. Vincent's Hospital, New York Dr. Ann Maria McVeigh

and from Corneall Medical Centre, New York Dr. Andrew Danyluk

Dr. C. Arabinda Das from Bangladesh underwent a training here for 10 weeks in the retina vitreous services. He was sponsored by RCSB.

At the request of Seva foundation, 7 members from Lumbini Eye Care Project in Nepal spent 4 months here training in the area of refraction and operation theatre management.

Mr. Elliot Marselle and Dr. Pant from Seva, Nepal visited Aravind in May 1986.

Mrs. Rebeka Khanam and Mrs. Pushpa Rani Mandal from Bangladesh were here for further training as ophthalmic nurses, sponsored by World Health Organisation.

#### MEDICAL STUDENTS

Ms. Lorraine Anderton	_	Liverpool UK
Mr. Bruce Lawrence	_	London UK
Ms. Michelene Holmes	_	USA
Mr. Clive Holmes	_	Leicestershire UK
Mr. Benjamin Harris	_	Liverpool UK
Ms. Susie Zussman	_	Cheshire UK
Ms. Ann Service	-	Scotland UK
Mr. John Olson	_	Scotland UK

#### CONTINUING EDUCATION:

Course on Paediatric Opthalmology was conducted on February 1 and 2 by

Dr. Joseph Calhoun – Wills Eye Hospital, Philadelphia, USA

Dr. Robert Letson - Univ. of Minnesota, USA

- Dr. Marilyn Miller Illinois Eye & Ear Infirmary Chicago, USA
- Ms. Joyce Mein Retd. Senior Orthoptist—The general Infirmary at Leeds U.K.
- Dr. P. Vijayalakshmi Aravind Eye Hospital, Madurai.



Workshop on Parsplana surgery in Anterior Segment disorders was conducted by the following doctors on July 26 and 27:

- Dr. P. Namperumalsamy :
- Dr. Taraprasad Das : Aravind Eye Hospital
- Dr. M. Srinivasan
- Dr. P. Vijavalakshmi

#### Course on Ophthalmology for general prac-

titioners was held by the following doctors of Aravind on the 11th October at Aravind Eye Hospital - Theni:

Dr.	Ρ,	Namperumalsamy	Dr.	Ρ.	Vijayalakshmi
Dr.	G.	Natchiar	Dr.	R.	Ravichandran

#### **OTHER VISITORS**

Dr. Arora - WHO Maldives Mr. Patrick Dique - USA Mr. Brack Leaberry-CILCO, USA Ms. Susan Eastman - UNICEF - Delhi Ms. Geetha Athreya - UNICEF - Delhi Mr. Hajee Badruddin Bin Abdul Ghani-Malaysia Rev. Dr. David Gecocillo – Philippines Prof. Mariaraj – CBM, Trichy Dr. Edward Mcmanus-National Eye Institute-USA. Rtn. Tony Pitts - Rugby, UK. Mr. Edward Glazier, HKI, USA Dr. Louis Pizzerello HKI, USA Mr. John Palmer - HKI, USA Dr. Susan Pettis - USA Mr. John Moore – USA Mr. Collin Saunders – UK Dr. Oddavar Otterlei - Norway.

The following doctors were at Aravind- some for training our staff and the others for gaining further experience.

- Australia

New York

- West Germany

- West Germany

- USA

- USA New Delhi

Peru

Brazil

Dr. & Mrs. Iceton	_	Aust
Dr. Aravind Kumar	_	USA
Dr. Howard Siegel	_	New
Dr. Mohi	_	Wes
Dr. Bianchi Bazzi	_	Wes
Dr. Gena Davis	-	USA
Dr. Gupta	_	New
Dr. S. Naga Subramanian	-	UK
Dr. Roger Buckley	-	UK
Dr. Francois	_	Peru
		-

Dr. Newton

#### MAGAZINE

The hospital is bringing out a Tamil magazine with the help of the Eye Bank of Madurai with the name "Kannoli". Edited by Dr. G. Natchiar, this monthly publication gives all the details of eve problems in simple language for the public at large to read and benefit.

#### SUPPORTING AGENCIES

All of us at Aravind are grateful for the constant support from SEVA and RCSB. Their participation in Aravind's work is increasing every year. This support comes mostly in the form of gifts of equipments and supplies. Direct Relief International has helped with the shipping of such gifts and has often added some medical supplies from their own inventory.

The following from the supporting agencies visited us:

Mrs. Claire Hicks, Head Personnel Appeal Section. Mr. David Wakeford, Regional Organiser from Midlands Mr. Hector Macaulay, Regional Organiser from Scotland Mr. Kevin Carey—Overseas Director and his wife		RCSB-UK
Dr. Rajendra T. Vyas Dr. P. A. Dikshit Dr. Indirabai Mr. B. Thanawala		RCSB — Bombay
Mr. Pasrich—Indian representat International	ive	-Direct Relief
Dr. Girija Brilliant	:	SEVA-USA



#### MALDIVES

Aravind Eye Hospital conducted its fourth eye camp at Maldives in January 1986. In this camp 1935 patients were screened and 177 were operated. 780 school children were examined for eye defects.

#### AWARDS

Dr. G. Venkataswamy was conferred with the Dr. M.P. Mehrey Memorial Award, instituted by the Government of U.P.

Dr. P. Namperumalsamy was awarded the "Dr. P. Siva Reddy Oration" Medal in January 1986 at the All India Ophthalmological Society conference at Kanpur.

Dr. P. Namperumalsamy was honored at the Madras State Ophthalmic Association Conference at Pondicherry with the "Dr. Joseph Gnanadhickam Memorial Oration" medal.



Dr. P. Namperumalsamy was awarded the "Dr. P. Siva Reddy Oration" Medal in January 1986 at the All India Ophthalmological Society conference at Kanpur.



# ARAVIND EYE HOSPITAL

### & POST GRADUATE INSTITUTE OF OPHTHALMOLOGY

1, Anna Nagar, Madurai-625020 India Phone: (0452)-43301 CABLE: ARAVIND EYE Telex: 445 340 AEH IN

#### BOARD OF TRUSTEES

President Dr. G. VENKATASAMY, M.S., D.O., F.A.M.S.

Mr. G. Srinivasan, B.E., M.S.<br/>Mr. S. Ramasamy, B.A.Dr. G. Nallakrishnan, M.S., Ph.D.<br/>Dr. P. Namperumalsamy, M.S., D.O.Mrs. Meenakshi Nallakrishnan<br/>Mrs. Lalitha Srinivasan<br/>Dr. Rajendra T. Vyas, M.A., L.L.B., Ph.D.Dr. Mrs. Natchiar Namperumalsamy, M.S., D.O.President, Rotary Club, Main Branch, Madurai (Ex-officio Trustee)Dr. G. Nallakrishnan, M.S., Ph.D.<br/>Dr. P. Namperumalsamy, M.S., D.O.