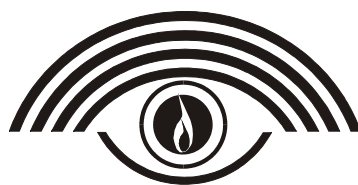
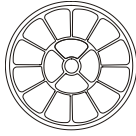


activities
2000



ARAVIND EYE CARE SYSTEM

Aravind Eye Hospitals & Postgraduate Institute of Ophthalmology • Lions
Aravind Institute of Community Ophthalmology • Aravind Centre for Women,
Children and Community Health • Aravind Medical Research Foundation • Aurolab



The central circle represents the *Divine Consciousness*

The four petals represent the *four powers of the Mother*

The twelve petals represent the *twelve powers of the Mother manifested for Her work*

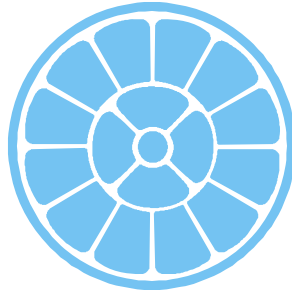


The descending triangle represents *Sat-Chit-Ananda (the pure consciousness of the divine)*

The ascending triangle represents the *aspiring answer from matter under the form of life, light and love*

The junction of both, the central square: is the *perfect manifestation having at its centre the Avatar of the Supreme-the lotus*

The water: inside the square-represents the *multiplicity, the creation.*



*Apart he lived in his mind's solitude,
A demigod shaping the lives of men:
One soul's ambition lifted up the race;
A Power worked, but none knew whence it came.
The universal strengths were linked with his;
Filling earth's smallness with their boundless breadths,
He drew the energies that transmute an age.
Immeasurable by the common look,
He made great dreams a mould for coming things
And cast his deeds like bronze to front the years.
His walk though Time outstripped the human stride.
Lonely his days and splendid like sun's.*

Sri Aurobindo

from: 'Savitri', Book I: "The Book of Beginnings"

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2000: the year in retrospect

Looking back at 25 years of growth and development, Aravind has transitioned from being an eye clinic to a network comprising of eye hospitals providing the largest volume of eye care, besides being equally involved in teaching, research and capacity building. It has developed a strong external focus and through LAICO, a structure to contribute to the national and international efforts in eye care. It also played a key role in the establishment of Aurolab, which has played a catalytic role in making IOLs affordable in the developing countries. Through Aravind Centre for Women, Children and Community Health, significant work has been done on Vitamin A deficiency to reduce Xerophthalmia and increase child survival. Recognising the broad spectrum of activities and the number of organisations involved, the overall entity is now called as "Aravind Eye Care System"



*The millennium year brought with it several new opportunities to Aravind. The core activity of providing eye care services continued to grow resulting in **1,330,993** out-patient visits, **192,765** surgeries and **1,548** screening eye camps. In addition to the patient care activities, several new initiatives got underway during the year.*

Aravind's foresight to plan for the future and tackle the growing problem of diabetic retinopathy was matched by the understanding of Lions SightFirst Programme who came forward to support the project. This has resulted in a pilot project to establish a community focused diabetic retinopathy management programme. For the purpose of developing a replicable model, this 5-year project will have a geographic focus in the districts of Madurai, Theni and Coimbatore. Encouraged by the positive improvements and changes brought about by the capacity building process carried out by LAICO, the Lions SightFirst Programme gave a grant to work with another 36 hospitals. This time the scope is extended to cover Lions supported eye hospitals in all of South-East Asia and Africa and to also include eye hospitals in start-up stage.

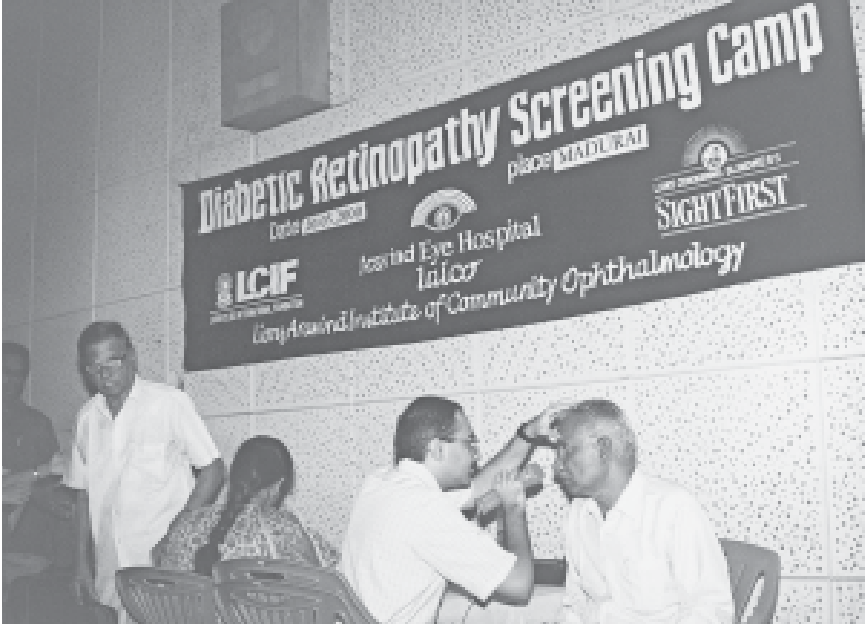
Highlights 2000

- Diabetic Retinopathy Project
- Molecular Genetics Research Designated as Clinical Examination Centre for National Board of Examinations
- Purchase of Land for the fifth Aravind Eye Hospital
- Instrument Maintenance Course offered at Kaduna, Nigeria
- New Collaborative Venture to Expand Eye Care Services

at the retreat:
planning for the future

Statistics 2000

Out-patient Visits	: 1,330,993
Surgeries	: 192,765
Eye Camps	: 1,548



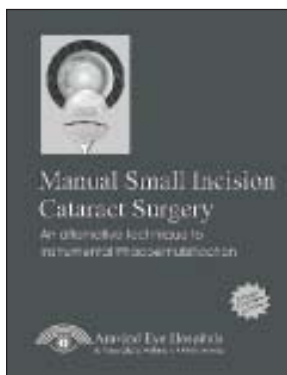
at a diabetic retinopathy screening camp

In order to further strengthen Aravind's basic research capabilities, a molecular genetics research project looking at Glaucoma disorders got underway in collaboration with the University of Iowa, USA. The two large community based clinical trials – "Role of Antioxidants in Cataract Prevention" and "Impact of Vitamin A Supplementation in Newborns" – continue to go on smoothly and the manner in which these studies are being carried out has been deeply appreciated by the external com-

mittees on data monitoring and safety. Several new research projects comprising of drug trials, population based survey and immunology got underway and some were completed during the year.

On the academic and training front, Aravind achieved three milestones.

A manual on small incision cataract surgery was brought out. Though several publications have been brought out, this manual is the first of its kind for Aravind since it has extensive computer generated graphics and is accompanied by a CD and video cassette containing video and animation clips. Though the original plan was to get this produced by an external publisher, circumstances and a series of seemingly unrelated events forced us to be involved in every stage of production down to printing and reproducing hundreds of CDs. This process forced us to learn all the steps involved in electronic multi-media publishing and develop a deeper understanding of the process.



The second milestone is the designation of Aravind as a clinical exami-

nation centre by the National Board of Examinations and conducting the examination in April 2000. This is the first time that a non-governmental institution has been given this responsibility. The third milestone and another first for Aravind, was the conduct of Instrument Maintenance course in Kaduna, Nigeria. This was fully sponsored by Sight Savers and co-ordinated by the West African Health Community. Very detailed planning and training of 3 Africans as trainers for an extended period of 3 months at Madurai preceded the course. These local trainers were supplemented by two West African's



at the health club in the postgraduate students hostel

trained in earlier courses at Aravind and two of Aravind's staff, who designed the course and acted as the resource persons. This first course in Africa trained nine West Africans in the maintenance of ophthalmic equipment.

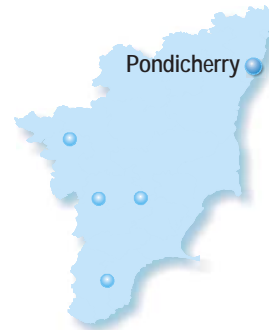
On the staff welfare front several major construction projects were inaugurated or commissioned during the year. At Madurai a well-designed block with 6 one-bed

room apartments was made available for staff accommodation in July 2000. Construction of a nurses' hostel to house more than 450 nurses with all supporting amenities got underway in Madurai. In the postgraduate hostel a health club was inaugurated with all the facilities of a modern gym. New staff housing projects are also being underway both at Theni and Tirunelveli. These facilities once completed will provide larger and more comfortable housing for the hospital staff.

Probably the most significant initiative in the year has been the decision to move ahead and expand the Aravind network of hospitals to a fifth location at Pondicherry. Adequate land has been purchased. The vision is to build it as an international model in functionality, patient friendliness, environmental consciousness and aesthetics. In order to get planning inputs to match the vision, the architect and Mr. G. Srinivasan, a founder trustee who oversees all construction activities, undertook a visit to Singapore and US to see several model eye hospitals and to interact with the architects who built them.

One of the new opportunities that is now emerging for Aravind, is to get into collaborative arrangements in providing eye care. Aravind already partners with more than 100 eye hospitals in India, South-East Asia and Africa in their development and capacity building. However, for the first time a collaborative working agreement has been entered into with the M.P. Birla group to establish a modern and yet a community focused eye care facility in Kolkata to serve the poor as well as the wealthy people of the eastern region.

The year also witnessed the senior staff of the Aravind Eye Care System getting together for a two-day retreat to plan for the future. In addition to envisioning the future, the focus was also on reorganising ourselves to become more effective and responsive to the opportunities and external changes.



Mr. Poornachandran teaching the instruments maintenance trainees at Nigeria



Dr. G. Venkataswamy and Smt. M.P. Birla



Dr. P. Namperumalsamy with Mr. R.S. Lodha of M.P. Birla Group



Aravind-Madurai (Paying)

Aravind Eye Hospitals & Postgraduate Institute of Ophthalmology

Paying and Free Sections

Aravind-Madurai

Aravind-Theni

Aravind-Tirunelveli

Aravind-Coimbatore



Aravind-Theni

Speciality Clinics

Retina and Vitreous

Cataract and General Ophthalmology

Neuro-Ophthalmology

Cornea

Paediatric Ophthalmology

Contact Lens

Glaucoma

Uvea

Orbit and Oculoplasty



Aravind-Tirunelveli

Ocular Microbiology Laboratory

Ophthalmic Research Laboratory: Genetics and

Immunology

Biochemistry

Radiology

Instruments Maintenance Laboratory

Patient Counselling Services

Audio-Visual Department

Library and Resource Centre

Computer Centre

Low Vision Rehabilitation Centre



Aravind Centre for Women, Children and
Community Health

Community Outreach

Free Eye Camps

School Eye Health Screening

Village Volunteers Programme

Community Based Rehabilitation Programme

Rotary Aravind International Eye Bank

Donor Screening

Collection, Evaluation, Preservation and

Distribution of Corneas

Training in Eye Banking

Training in Corneal Transplants

Research

Aravind Medical Research Foundation

Hospital and Community Based Randomised Clinical Trials
Population Based Epidemiologic Surveys
Health Systems Research
Basic Laboratory Research - Genetics, Microbiology, Bio-chemistry

Education and Training

Aravind Postgraduate Institute of Ophthalmology & Lions Aravind Institute of Community Ophthalmology (LAICO)

Postgraduate Courses in Ophthalmology
Fellowship Programmes
Short-term Training Programmes
Continuing Medical Education Programmes

Consultancy and Capacity Building

Lions Aravind Institute of Community Ophthalmology (LAICO)

Management Courses in Health Care
Task-oriented Training Courses
Custom Designed Courses
Capacity Building for Eye Hospitals

Women and Child Care

Aravind Centre for Women, Children and Community Health

Primary Health Care Programmes
Health Awareness Programmes
Nutrition Related Blindness Prevention Programmes

Development of Cost Effective Technology

Aurolab

Intraocular Lens
Ophthalmic Suture Needles
Ophthalmic Pharmaceuticals
Low Vision Aids
Spectacle Lens Division



Aravind-Madurai (Free)



Lions Aravind Institute of Community Ophthalmology and Aurolab

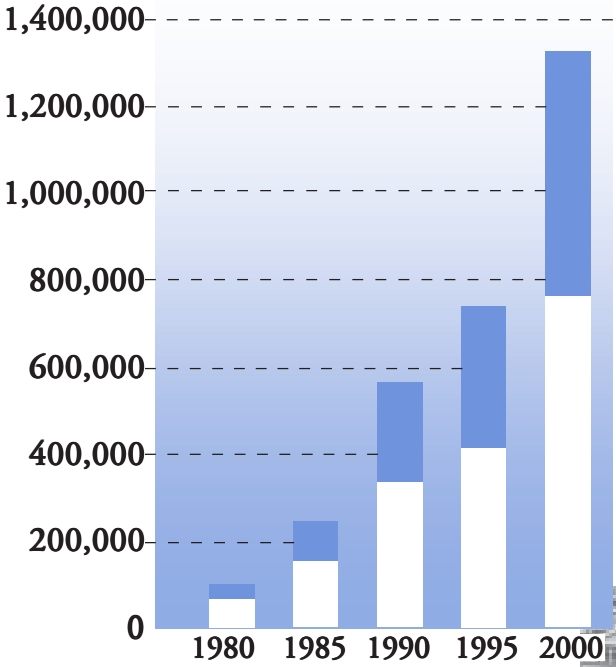


Aravind-Coimbatore

Statistics 2000

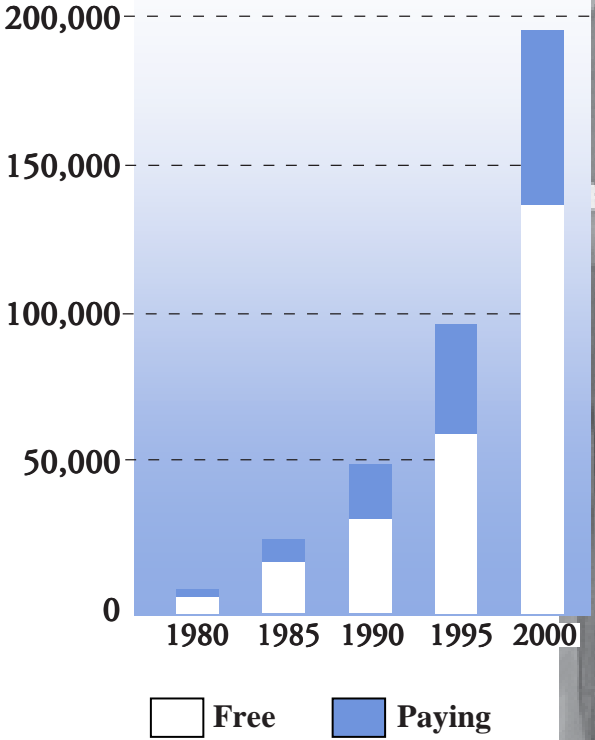
	Madurai	Tirunelveli	Theni	Coimbatore	Total
Out-patient visits					
Paying	250,559	103,464	32,762	180,320	567,105
Free	336,119	152,082	41,662	234,025	763,888
Surgeries					
Paying	31,012	8,933	1,596	16,726	58,267
Free	66,913	21,955	6,210	39,420	134,498
Hospital out-patient visits	403,403	163,515	56,037	281,688	904,643
Eye camp out-patient visits	183,275	92,031	18,387	132,657	426,350
Total out-patient visits	586,678	255,546	74,424	414,345	1,330,993
Screening camps	577	391	167	413	1,548
Surgeries					
Extra Capsular Cataract Extraction (ECCE) & other lens removal procedures without IOL	2,248	485	180	1,447	4,360
ECCE with IOL implantation	48,085	10,104	6,478	10,019	74,686
ECCE IOL implantation with phaco	9,507	2,998	291	7,132	19,928
Small Incision Cataract Surgery	18,509	11,913	-	26,556	56,978
Trabeculectomy & combined procedure	1,510	747	45	840	3,142
Retinal Detachment	665	78	-	392	1135
Vitreous surgery	486	47	2	479	1014
Membranectomy	73	5	2	47	127
Squint correction	468	39	-	10	517
Keratoplasty	316	6	-	85	407
Pterygium	357	113	23	241	734
Ocular injuries	311	100	32	542	985
Orbitotomy	61	-	-	6	67
Ptoisis	101	1	-	19	121
Lid & Socket reconstruction	723	131	35	417	1,306
Lacrimal surgeries	2,944	1,138	299	1,349	5,730
Other orbit and Oculoplasty surgeries	476	88	24	172	760
Others	1,366	93	82	1,500	3,041
Laser procedures					
Laser photocoagulation	5,108	1,373	48	3,028	9,557
Nd. yag iridectomy	1,720	760	67	299	2,846
Nd. yag capsulectomy	2,073	669	198	1566	4,506
LASIK refractive surgery	818	-	-	-	818
Total	97,925	30,888	7,806	56,146	192,765

Out-patient visits



What is not so obvious is the extraordinary amount of innovation that has been done, everything from organising the camps, to the workflow in the camps, to the way the patients are treated, fundamental innovations in the way the surgery is performed. .
 - C.K. Prahalad,
 Management Consultant,
 University of Michigan,
 USA

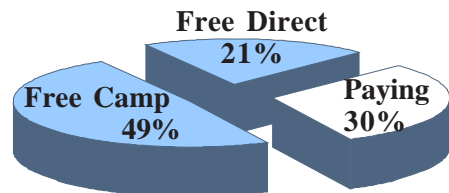
Surgery



Free Paying



Community Outreach Programmes



Surgeries 2000

Almost 50% of the overall patients who undergo surgery at Aravind Eye Hospitals come through free eye camps.

The community outreach programmes provide curative, preventive, promotive and rehabilitative care to the community along with IEC (Information, Education,

Communication) programmes to improve service delivery to potential patients in the community. These programmes pave way to eradicate needless blindness and to achieve the Vision 2020 goals.

Free Eye Camps

Implementing plans that are constantly being improved, the camp organisers have successfully increased the number of camps held, the number of out-patients and patients brought for surgery. In the year 2000, 1,548 eye camps were conducted in which a total of 426,350 people were screened and 93,519 underwent surgery.

Diabetic Retinopathy Management: Lions Pilot Project

The main objective of the project is creating community awareness. Other activities include screening diabetic retinopathy patients and health education. In the year 2000, 26 diabetic retinopathy screening camps were conducted in which 5,085 patients were screened and 2,616 were

camp sponsors:
vital link with the
community

found to be diabetic. Among these diabetic patients 442 were identified with diabetic retinopathy. In addition to this over 52,666 patient information pamphlets and brochures were distributed through various means in the project areas.

Village Volunteers Programme (VVP)

This year the VVP programme was implemented by three voluntary organisations in Trichy and Karur districts. A total of 243 cataract cases were identified and 224 were brought to the hospital for surgery.

School Eye Health Programme

During the year 73,776 children in 90 schools were screened for eye defects and 3,249 children were given glasses to correct their refractive errors.

Comprehensive Eye Care Services at Aravind-Theni

Launched in 1996 at Aravind-Theni with support from Sight Savers International, UK, this project provides preventive, promotive, curative and rehabilitative services to the entire service area of Theni consisting of a population of nearly one million.

The second phase was completed in March and the last phase commenced on July 1 in the three blocks of Uthamapalayam, Cumbum and Bodinayakannur districts which covers a total population of 2,42,764. Field workers selected from these three areas are trained in basic eye care, survey methods and to be an effective CBR worker. The field workers will conduct survey and eye camps in the project area after the training. The curable and incurable blind patients will be identified during the camp and the field workers will then start the CBR training for the incurably



blind in the areas of orientation, mobility activities of daily living skills and economic rehabilitation etc. This phase of the project targets to rehabilitate about 240 blind people and is expected to be complete in two years.

Sponsors day

Sponsors day is organised annually in all the Aravind Eye Hospitals (Madurai, Theni, Tirunelveli and Coimbatore) in order to appreciate the sponsor's contribution to the community. It is through their help that people in remote villages receive the services of Aravind. Sponsors from various organisations actively participated, shared



patients at a screening eye camp

their experience and discussed ways for further improvement.

This year the Sponsors Day for Aravind-Madurai and Aravind-Theni was held together at Aravind-Madurai.

for School Children - 2000

	Madurai	Tirunelveli	Theni	Coimbatore
No. of Schools	22	21	14	33
Teachers trained	200	103	83	48
Children screened	20,493	18,390	7,383	27,510
Children with eye defects	1,385	1462	260	2,903
Children with refractive errors	904	857	102	1,386

Sponsoring Organisations	No. of camps	Out-patients	Cataract surgeries (with and without IOL)	Other surgeries	Total surgeries
Lions Clubs	401	149,959	31,159	1,099	32,258
Rotary Clubs	67	25,820	6,235	250	6,485
Vivekananda Kendram	54	12,246	2,382	106	2,488
Sri Sathya Sai Samithi	80	25,780	6,605	207	6,812
Religious Organisations	74	21,121	4,948	162	5,110
Junior Chamber	4	1,168	178	2	180
Banks	7	2,153	405	7	412
Mills and Factories	16	10,288	2,483	110	2,593
DBCS	306	36,968	9,101	350	9,451
Educational Institutions	68	13,569	2,280	100	2,380
Hospitals	76	16,186	3,019	129	3,148
Trusts	53	18,579	4,111	127	4,238
Youth and Fans Association	47	10,390	2,141	69	2,210
Other Voluntary Organisations	156	39,263	6,585	178	6,763
Others	139	42,860	8,661	330	8,991
Total	1,548	426,350	90,293	3,226	93,519

Education and Training

Aravind Postgraduate Institute of Ophthalmology



trainee observing a surgery

Glaucoma

Dr. Datla Ravi

Orbit & Oculoplasty

Dr. Maneesh Kumar

Cornea

Dr. Sangita Prasad

Dr. Seema Lodha

Paediatric Ophthalmology & Strabismus

Dr. George Chavley Varkey

IOL

Dr. Poornima

Dr. Pankaja Dhoble

Dr. Tulika Dabral Kar

Dr. Rani Jacob

Dr. Praveen Kumar Reddy

Dr. Anand Rati

Dr. Ramakrishnan

Retina & Vitreous

Dr. Rodney John

Morris

Dr. Shermila M.V.

short-term trainees
with Dr. G. Venkata
-swamy

The education and training programmes at Aravind Eye Hospitals are intended for all levels of ophthalmic teaching and training of ophthalmologists, ophthalmic technicians, clinical assistants, outreach co-ordinators and health care managers.

Postgraduate Training in Ophthalmology

In affiliation with

Dr. MGR Medical University, Chennai

- Diploma in Ophthalmology (DO) Nine candidates graduated during the year 2000.
- MS in Ophthalmology (MS) Four candidates graduated during the year 2000.

National Board of Examinations, New Delhi

- Diplomate of the National Board (Dip. NB). A total of 16 comprising of those doing the course after D.O. and direct 3 year candidates successfully passed the final examination of National Board in 2000.

Royal College of Ophthalmology, London, UK

- Membership of the Royal College of Ophthalmologists (MRCOph.). Six candidates passed the part-I and three passed the part-II examinations. In addition 9 candidates got their FRCS.

Fellowship Programmes

In 2000, fourteen ophthalmologists underwent fellowship training programmes in various sub-specialities of ophthalmology.

Short-term Courses for Practising Ophthalmologists

IOL Microsurgery Training Programme:

During the year 2000, 97 ophthalmologists including 3 from other countries (Germany, Italy and Latvia) underwent this training at Aravind-Madurai, Aravind-Tirunelveli and Aravind-Coimbatore.

Lasers in Diabetic Retinopathy Management:

The two courses 'Training in Indirect Ophthalmoscopy' and 'Lasers in Management of Diabetic Retinopathy' are now offered as a combined course at Aravind-Madurai and Aravind-Coimbatore with support from Lions SightFirst Programme. Thirty-one ophthalmologists have received this training in the year 2000.

Diagnosis and Management of Glaucoma:

Offered at Aravind-Madurai and Aravind-Tirunelveli, this course has trained 31 candidates in 2000.

Visiting Residents

Students from various universities in the US come to Aravind during the final year as part of their residency in ophthalmology. In the year 2000 eleven residents from the following institutions were at Aravind. Greater Baltimore Medical Centre, Baltimore; University of Wisconsin Medical School, Madison; University of Illinois, Chicago; St. Vincents Hospital, New York; Massachusetts Eye and Ear Infirmary, Boston and Wilmer Eye Institute, Baltimore.



Training in Ophthalmic Nursing and Housekeeping

The ophthalmic nursing and house-keeping training courses are offered to high school graduate girls. The teaching methodology and syllabus is designed to suit the needs of Aravind Eye Hospitals.

In 2000, 120 students graduated as ophthalmic nurses and 14 candidates completed training in housekeeping.

Speciality Training

Dr. Kalpana Narendran, Medical Officer, Paediatric Ophthalmology, Aravind-Coimbatore spent about 3 months in the USA from August 3 to November 1. The main purpose of her trip was to learn state-of-the-art technologies in diagnosis and treatment of Paediatric Ophthalmology and Strabismus. She was in the Jules Stein Eye Institute, Los Angeles, for the first two months, where Dr. Sherwin Isenberg guided her. Later she visited the clinic at the UCLA Harbor County Hospital. During the training she concentrated mainly on learning the new treatment modalities for vertical strabismus and surgery for nystagmus.

Dr. McDermott, a close associate of Aravind family, made all the necessary arrangements for her visit to the retinoblastoma centre chaired by Dr. Linmurphree.

At Boston, Dr. Kalpana met Dr. Robert Peterson and Mrs. Veronica Peterson. She also visited the Children's Hospital and Beth Israel Hospital. At the Seva Office in Berkeley she gave a talk on paediatric eye problems. Accompanied by Dr. Suzanne Gilbert she went to the Stanford Eye Centre where she met Dr. Peter Egbert. She had an opportunity to meet Dr. Charles Schepens (Father of Retina Surgery). At the AAO meeting in Dallas, she performed wet lab on laser phaco which was introduced by Paradigm and gave a lecture to the residents at



St. Vincent's hospital. She spent a couple of days with Dr. Christine Melton at New York and visited the retinoblastoma clinic started by Rees & Elsworth, currently headed by Dr. David Abrams.

Dr. N.V. Prajna and Dr. Sasikumar with residents from the US Dr. Eugene Ng from Wilmer Eye Institute, Baltimore and Dr. Bala Ambati from Mass Eye and Ear Infirmary, Boston



Dr. Kalpana with Dr. Sherwin Isenberg at Jules Stein Eye Institute, Los Angeles

with Dr. Charles Schepens and Dr. P. Namperumalsamy in Boston



Aravind-Madurai, January 10-11



Dr. P. S. Viridi



Dr. P. Vijayalakshmi

A two-day CME programme on update in ophthalmology was organised by Aravind-Madurai and LAICO, sponsored by Medical Council of India, New Delhi. One hundred and thirty eight participants attended the programme. The faculty included eminent non-resident Indian ophthalmologists and other experts from USA besides in-house faculty from Aravind Eye Hospitals. The scientific sessions covering all the sub-specialities in ophthalmology consisted of didactic lectures, video sessions and panel discussions.

Dr. Ivan Schwab

- *Red flags for the cataract surgeon*
- *New pharmaceutical agents*

Dr. P. S. Viridi

- *Phaco chop*
- *Phacoemulsification in mature cataracts*

Dr. V.K. Raju

- *Refractive cataract surgery*
- *RK, PRK and LASIK – where are we now?*
- *Keratoplasty in high risk patients*
- *Recent advances in the management of pterygium*

Dr. Alan Robin

- *Recent advances in automated perimetry*
- *The potential for neuroprotection glaucoma*
- *Management of congenital glaucoma*

Dr. Emmett Cunningham

- *Mooren's ulcer – an overview*
- *Use of corticosteroids and immunosuppressives in uveitis*

Dr. Suresh Chandra

- *Diabetic retinopathy – An overview*
- *Macular hole surgery*
- *Update on management of ARMD*

Dr. Michael Altaweel

- *Ocular manifestation of AIDS (CMV retinitis, acute retinal necrosis)*
- *White dot syndrome*
- *Von Hippel Lindau disease*
- *Purtscher's retinopathy*
- *Iris melanoma*
- *Endophthalmitis update*

Dr. Robert Peterson

- *Current concepts in the management of retinoblastoma*
- *Screening for ROP*

Dr. P. Namperumalsamy

- *Management of ERM*

Dr. M. Srinivasan

- *LASIK – Madurai experience*

Dr. P. Vijayalakshmi

- *IOL implantation in children*

Dr. R. Ramakrishnan

- *Non-penetrating filtering operations – Pros & Cons*

- *Handicaps in glaucoma diagnosis*

Dr. S. R. Krishnadas

- *Management of high risk glaucoma*

Dr. R. D. Ravindran

- *Manual phaco*

Dr. P. Mohan

- *Phacoemulsification in mature cataracts*

- *Mature and hypermature cataract*

- *Management of subincisional cortex in SICS*

Dr. R. Kim

- *Macular translocation*

All India Uveitis Conference

Aravind - Madurai, January 12-13

The fifth All India Uveitis conference was organised by Aravind Eye Hospital-Madurai in which 100 participants from many parts of the country and abroad attended. They participated actively in the proceedings. Aravind students presented cases. The guest faculty included, Dr. Narasing Rao, Dr. Robert Nozik, Dr. Emmett Cunningham, Dr. James E. Puklin and Dr. Ivan R. Schwab, from USA, Dr. Q. Adnan Tufal, UK, Dr. Vishali Gupta, Chandigarh, Dr. S.P. Garg, Delhi, Dr. Virander Sangwan, Hyderabad and Dr. Jyotirmoy Biswas, Chennai.

Dr. Rathinam received a unique certificate from the participants 'in appreciation of her extraordinary efforts that resulted in a successful conference'.

Dr. Emmett Cunningham

- *Anterior uveitis*

- *Retinal use of diagnostic laboratory testing*

- *Paediatric uveitis*

Dr. James E. Puklin

- *Current management options in HIV*

- *Severe viral retinitis in immuno competent patients*

- *Syphilitic posterior uveitis patterns of acute and chronic uveitis*

Dr. Robert A. Nozik

- *Naming meshing*

- *Sarcoid uveitis*

Dr. Narsing A. Rao

- *Immunosuppressives in uveitis*

- *Uveitis in elderly specific emphasis and lymphoma*

Dr. Ivan R. Schwab

- *Iris findings, part I and II*

- *Fuch's heterochromic uveitis*



Dr. Q. Adnan Tufal

- *Non CMV complication of HIV*
- *CMV retinitis*
- *Toxoplasmosis*

Dr. Vishali Gupta

- *Serpiginous choroidopathy and other white dot syndromes*
- *USG*
- *Fungal endogenous endophthalmitis*

Dr. S.P. Garg

- *When not to use steroids in uveitis*
- *Problems in management of uveitis in developing countries*

Dr. Jyotirmoy Biswas

- *HIV-Indian experience*
- *UBM, FFA and ICG*
- *Tubercular uveitis*

Dr. Virander Sangwan

- *Sympathetic ophthalmia and VKH syndrome*
- *Cataract extraction in uveitis*

Dr. P. Namperumalsamy

- *Laser and posterior segment surgery*

Dr. S.R. Rathinam

- *History of uveitis*
- *Laboratory diagnosis of leptospirosis*

Sixth Ophthalmology Update

Aravind - Madurai, January 16-22

Seventh Ophthalmology Update

Aravind - Madurai, July 16-22

The sixth and seventh ophthalmology update courses were attended by postgraduate students from various states in India. The prime aim of the course was to expose them to

clinical presentation of various ophthalmic diseases, current trends of management and to enable them to face their examination with confidence. Students in batches were involved in theory sessions, case discussions, operation theatre observation, video and slide shows. The panel of examiners included: Dr. Satish, Manipal; Dr. Thirumalachar, Karnataka; Dr. Renuka Srinivasan, JIPMER, Pondicherry and Dr. M. Srinivasan, Chief Medical Officer, Aravind-Madurai.



Workshop on Small Incision Cataract Surgery – Manual SICS

Aravind-Coimbatore, February 19-20

Over 205 participants attended the SICS workshop. The workshop provided the practicing ophthalmologists an opportunity to familiarise themselves with the basic techniques of manual SICS. Interactive sessions were held, by relaying surgery from the operation theatre to the auditorium, demonstrating the techniques utilised in different situations. A unique feature was the relay of live surgery utilising more than one camera from different angles. This enhanced the meticulous details of microsurgery, the techniques of holding instruments and the position of eyeball in each step. The workshop conveyed a better understanding of the technique for practical application to the ophthalmologists.

Senior faculty members from Aravind Eye Hospitals spoke on the following topics:

Dr. G. Natchiar

- *Introduction to SICS*
- *Learning curve of SICS*
- *Role of SICS in high volume practice*

Dr. R. Ramakrishnan

- *SICS in difficult situations*
- *SICS in secondary implants*

Dr. P. Vijayalakshmi

- *Role of SICS in paediatric cataract*

Dr. R. D. Ravindran

- *Capsulotomies & Flipping of nucleus in SICS*
- *Comparison of manual SICS with instrumental phaco*

Dr. Kalpana Narendran

- *Intraoperative complications of SICS*

Dr. Anup Chirayath

- *Removal of nucleus*
- *Irrigating vectis technique*

Dr. Revathi

- *Corneal complications in SICS*

Dr. Usha Kim

- *Conversion - When & How?*

Dr. V. Jaison

- *Delivery of nucleus through various tunnel techniques (Hydroextraction / Sandwich / Phaco Fracture)*

Dr. P. Sathyan

- *SICS in filtering procedures*

Dr. Manas K. Ghosh

- *Wound construction*

Dr. Venkatesh

- *Basic steps of SICS*



sixth CME for short-term IOL trainees at Aravind-Tirunelveli



at Aravind-Madurai



at Aravind-Coimbatore

Sixth CME for IOL Microsurgery Trainees

Aravind-Madurai, Coimbatore and Tirunelveli, August 20-26

The sixth CME was simultaneously organised in three of Aravind's hospitals. A total of about 66 delegates attended.

Symposium on Contact Lens

Aravind-Madurai, August 25

A short symposium on contact lens, which was sponsored by Johnson & Johnson, was organised as part of the regular CME programme.



Dr. R. Rama-krishnan and Dr. R. Kim at the Diabetic Eye Disease Awareness Programme

Contact Lens Education Programme

Aravind-Madurai, September 23-24
The Contact Lens Education

Programme was organised at LAICO by Bausch & Lomb and Aravind-Madurai in which over 75 of them participated. The programme focussed on 'Basics on Contact Lens Fitting'. The following papers were presented during the programme:

- Dr. P. Vijayalakshmi
 - *Complications of soft contact lens wearers*
- Dr. Arunava Kundu
 - *Anatomy & Physiology of the eye*
- Ms. Anantha Lakshmi
 - *Introduction to contact lens*
 - *Soft contact lens fitting*
 - *Toric contact lens fitting*
- Ms. Janaki Vaidyanathan
 - *Contact lens deposits, contact lens care and maintenance*
 - *Bausch & Lomb product overview*
 - *Practice management*
 - *World-wide trends in contact lens*

Diabetic Eye Disease Awareness Programme

Aravind-Tirunelveli, December 31

- Dr. Ramakrishnan
 - *Diabetic eye disease - An overview*
- Dr. R. Kim
 - *Diabetic retinopathy, its complication management*
- Dr. Sivaramakrishnan
 - *Diabetes - Feature, prevention, management*
- Dr. Manakavalam Perumal
 - *Diabetes general aspects*
- Dr. Senthilnathan
 - *Ocular manifestation of diabetes*
- Dr. J. Balasubramanian
 - *Kidney and diabetes*
- Ms. Vasantha
 - *Diabetic diet objective*
- Mr. Srinivasan
 - *Yoga for diabetes*

Conferences Attended Elsewhere

58th All India Ophthalmological Society Conference

Chennai, January 6-9

Dr. P. Namperumalsamy

Vitreoretinal Society Meeting

Chaired the,

- Symposium on diabetic retinopathy and gave introduction
- Free paper session on retina

Dr. G. Natchiar

- Chaired the free paper session on cataract

Dr. M. Srinivasan

- Moderator of cornea session
- Debate: Manual small incision surgery
- Eye banking - Rotary Aravind Eye Bank - our success

Mr. R.D. Thulasiraj

- Vision 2020 - Right to Sight, Human resource development in India

Dr. R. Ramakrishnan

- Management of refractory congenital glaucoma

Dr. R. D. Ravindran

- Moderator for free paper session in community ophthalmology

Dr. S. R. Krishnadas

- Video: Donor scleral patch graft for postoperative hypotony following mitomycin trabeculectomy

Dr. S. R. Rathinam

- Clinical evaluation of a patient with posterior uveitis

Dr. Usha Kim

- 'Proptosis' an epidemiological study
- Comparison of preoperative CT scan diagnosis and postoperative histopathological diagnosis

Dr. V. Narendran

- Globe perforation due to retrobulbar anaesthesia

Dr. P. Mohan

- Phaco in mature / HML using modified technique of IOL
- Role of SICS in vitreoretinal surgery
- Phacoemulsification in post uveitic cataract

Videos:

- Scleral fixative PC IOL through scleral tunnel in miotic pupil (Pseudoexfoliation case)

- Manual small incision cataract surgery on topical anaesthesia

Dr. Kalpana Narendran

- Incidence of posterior capsular opacification in paediatric cataract

- Prevalence of amblyopia in school children

Dr. R. Revathi

- Paediatric ocular trauma

Dr. P. Balakrishnan

- Development of instruments and tools in India

Dr. Arun Samprathi

- Incidence of posterior capsular opacification in paediatric cataracts

- Amblyopia in school children

Dr. Kuldeep Srivastava

- Surgical management of hereditary ectopia lentis in children

- Posterior chamber intraocular lens implantation for traumatic cataract in children

Dr. Anup Chirayath

- Terson's syndrome - A clinical study

- Lenticular infiltration - An enigmatic experience

- Video: Manual phaco in cataract nigra

Dr. Meenakshi

- PC IOL in PPC in paediatric cataracts

Dr. P. Sathyan

- Combined surgery - Phaco trab versus ECCE trab using mitomycin-C as a primary procedure

- Video: Manual phaco in mature and hypermature cataracts

Dr. K. Manjula

- Apranclonidine and dorzolamide comparably influence IOP rise following posterior chamber lens implantation in glaucomatous eyes

Dr. Ravi R. Gandhewar

- Laser cilioretinal anastomosis in non-ischemic central retinal vein occlusion

Dr. Meenakshi Sharma

- Outcome of strabismus surgery in congenital esotropia

Dr. Maneesh Kumar

- Scleral graft for superior sulcus syndrome

- Alternative sites for dermis fat graft

Dr. Tulika Dabral Kar

- Manual small incision cataract surgery in high quality, high volume set up - A great alternative for instrumental phaco

Dr. George Varghese Puthuran

- Apranclonidine and dorzolamide comparably influence IOP rise following Nd: Yag capsulotomy

Dr. N. Sunil

- Papillophlebitis - prognosis and management

Dr. Prajakta,

Dr. R. Ramakrishnan, Dr. Ravi Datla, Dr. Mohaideen Abdul Kader

Poster

- Asymmetric disc or cup?

Dr. Ramakrishnan, Mr. Jayahar Bharathi, Dr. Prasad Walimbe

Poster

- Mycotic keratitis in South India

Dr. Seema Mehta,

Dr. M. Srinivasan

- Penetrating keratoplasty in suppurative keratitis

International Symposium on Cataracts, "Molecular and Epidemiological Aspects"

Taramani, Chennai, January 31

Dr. P. Namperumalsamy

- Cataract blindness in children- Indian perspective

Dr. P. Vijayalakshmi

- Morphology and etiology of congenital cataract

13th Workshop on Hospital and Health Services Management
organised by CMAI at Bangalore,
February 5

Mr. A.K. Sivakumar

- *Materials management*
- *“Total Quality Management” in hospitals*

Vitreo-retinal Society Conference

Amristar, Punjab, February 12-13

Dr. P. Namperumalsamy

- *Talk on: Diabetic blindness, need for national programme planning*
- *Chairman: Session on posterior segment - ocular trauma*

Dr. N. Sunil

- *Vitreotomy under air - a new technique*

Symposium on Eye Care Research and Service Delivery

Bethesda, USA, February 14-17

Mr. R. D. Thulasiraj

- *Results of blindness survey in Sivaganga district*
- *Eye care capacity building and outcomes*

Dr. N.V. Prajna

- *Cataract outcomes and patient follow-up including posterior capsular opacification incidences*

Ms. Preethi Pradhan

- *Patient satisfaction: Measurement and strategies for improvement*

Glaucoma Conference

Chennai, February 26

Dr. R. Ramakrishnan

- *Current concepts in medical management of glaucoma*

Technical Workshop on Health Service Quality

Ahmedabad, March 17

Dr. R.D. Ravindran

- *Approaches and experience of quality improvement in hospitals services*

“Ask the Masters” Symposium

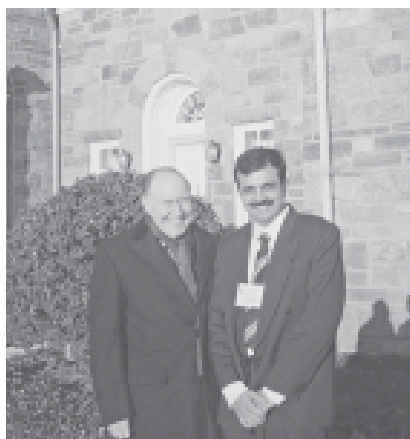
sponsored by Allergan at Prem’s Eye Clinic, Chennai, March 26

Dr. S. R. Krishnadas

- *Panel discussion on glaucoma*

Dr. N. V. Prajna

- *Panel discussion on refractive*



Dr.Prajna with Dr. Carl Kupfer at the NEI, Bethesda

surgery

Workshop on Current Trends in Ophthalmology

Sankara Nethralaya, Chennai,

March 24

Dr. G. Venkataswamy

- *Cataract blindness - Current perspective, epidemiological and operation research*

Dr. D. Sundaeswaran Endowment Oration

Indian Medical Association

Coimbatore, March 26

Dr. M. Srinivasan

- *Changing trends in the treatment of eye diseases and role of physicians in the management of eye disease*

State Level Workshop on Recent Trends in Bio-Medical Instrumentation

sponsored by University Grants

Commission (UGC) at P.S.G.

College of Arts and Science,

Coimbatore, March 27

Special Lectures

Prof. V. Srinivasan

- *The use of light (Lasers) and sound (Ultrasound) in ophthalmology - basic principles*

Dr. N. Sunil

- *Argon laser and its applications (visible light)*

Dr. P. Sathyan

- *Nd: Yag Laser and its applications (infra red light)*

Dr. R. Revathi

- *Excimer laser and its applications (ultra violet light)*

Workshop on Childhood Blindness (ORBIS)

New Delhi, April 3-5

Dr. P. Vijayalakshmi

- *Setting up a paediatric ophthalmology unit - Experiences from Aravind*

Glaucoma Workshop

Chaithanya Eye Hospital and Trivandrum Ophthalmic Association, Trivandrum, April 16

Dr. R. Ramakrishnan

- *Normal tension glaucoma and update on medical management of glaucoma*

TTKN Chapter of Pedicon 2000

Myaladurai, April 23

Dr. Kuldeep Srivastava

- *Common eye problems in children*

Annual Meeting of the Association for Research and Vision and Ophthalmology (ARVO)

Fort Lauderdale, Florida, USA,

April 30-May 5

Mr. R. D.Thulasiraj,

Dr. R. Ramakrishnan and

Dr. S.R. Krishnadas attended.

There they presented the ACES (Aravind Comprehensive Eye Survey) data.

Mr. R. D. Thulasiraj

- *Blindness and visual impairment in the session on epidemiology of visual impairment*

Dr. R. Ramakrishnan

- *Prevalence of glaucoma in the population based study in the session on epidemiology of cataract*

Dr. S. R. Krishnadas

- *Prevalence of exfoliation and glaucoma in rural population of South India*

Dr. R. Ramakrishnan and

Dr. S. R. Krishnadas

- *Poster: Combination of brimonidine and latanoprost in the treatment of glaucoma*

The following presentations of

ACES data were also made by the Vitreoretinal services of Aravind Eye Hospital (Dr. R. Kim, Dr. V. Narendran) and the Dana Centre for Preventive Ophthalmology (Dr. James Tielsch, MPH).

- *The prevalence of age related maculopathy in South India*
- *The prevalence of diabetes and diabetic retinopathy in a population 40 years or older in rural South India*

World-wide Glaucoma Meeting

Baltimore, USA, May 6-7

Mr. R.D. Thulasiraj, Dr. R. Ramakrishnan and Dr. S. R. Krishnadas attended the meeting convened to discuss the modalities of early diagnosis of glaucoma and its management.

Workshop on Challenges of Health Care Management

Nainital, May 14-16

Mr. Keerti Bhusan Pradhan

- *Paradigm shift in health care*
- *National health programme - NPCB, eye care in India - past and present, magnitude of blindness, Vision 2020, Aravind Eye Hospital*

Ms. Preethi Pradhan

- *Patient satisfaction and measurement strategies*

Workshop on Vision 2020

Institute of Ophthalmology, Joseph Eye Hospital, Trichy, June 17-18

Dr. G. Natchiar

- *Appropriate strategies for cataract blindness, childhood blindness and refractive errors*

Mr. R. D. Thulasiraj

- *Manpower development at primary, secondary and tertiary levels, including managers and equipment technicians*
- *NGO's in southern region*

CME on Strabismus

Regional Institute of Ophthalmology, Trivandrum, July 2



Dr. M. Srinivasan with other delegates in Istanbul, Turkey

Dr. P. Vijayalakshmi

- *Visual acuity evaluation in infants*
- *Esotropias*

3rd International Conference on Cornea, Eye Banking and External Diseases

Istanbul, Turkey, July 13-16

Dr. M. Srinivasan

- *Penetrating keratoplasty in suppurative keratitis*
- *Managing recurring costs of eye banks in developing countries*



Dr. R. Ramakrishnan, Dr. S. R Krishnadas and Mr. R. D. Thulasiraj at the World-wide Glaucoma Meet

- Success of eye banking in Madurai, Tamil Nadu, South India
- Eye donation in South India

CME in Glaucoma

Villupuram Ophthalmologists Association sponsored by Allergan India, Villupuram, June 25

Dr. Ramakrishnan

- Optic nerve head in glaucoma
- Filtering surgery techniques
- Demonstration of automated perimetry

Dr. S. R. Krishnadas

- Gonioscopy
- Interpretation of automated perimetry

India Investigator Meet

convened by Allergan Inc., USA Chennai, July 16

Dr. R. Ramakrishnan,

Dr. S.R. Krishnadas and

Mr. Manimaran attended the meeting to discuss about the conduct of the study “Safety and Efficacy” of 0.2 brimonidine (Alphagan) vs trusopt in paediatric glaucomas.

48th Tamil Nadu Ophthalmic Association Conference

Madurai, August 11-13

Dr. G. Venkataswamy

- Q & A, Vision 2020 session: Do we need more ophthalmologists?

Dr. P. Namperumalsamy

- Guest lecture: Diabetic retinopathy
- Q & A, Vision 2020 session: Are we ready for super specialisation and is it practical for an ophthalmologist to practice only the super specialty?

Dr. P. Vijayalakshmi

- Morphological classification of congenital cataract
- Postoperative rehabilitation of aphakia pseudophakia
- Surgical management of vertical diplopia

Mr. R. D. Thulasiraj

Convenor of the Vision 2020 session

- Q & A, Vision 2020 session: What is the visual acuity outcome of

cataract surgery in Tamil Nadu?

Dr. R. Ramakrishnan

- Application of SICS techniques in glaucoma - combined procedure
- Early diagnosis of glaucoma in developing countries

Dr. S. R. Krishnadas

- Prevalence of glaucoma and glaucoma blindness in South India

Dr. P. Balakrishnan

- Considerations in selection and purchase of ophthalmic equipment

Dr. VR. Muthukkaruppan

- Autoimmune diseases in ophthalmology

Dr. R. D. Ravindran

- Chaired the video interactive session on challenges in anterior segment surgery

- Q & A, Vision 2020 session: How can an individual doctor improve his/her performance?

Dr. R. Kim

- Acute postoperative endophthalmitis

Dr. S. R. Rathinam

- Posterior segment involvement in AIDS

Dr. Usha Kim

Chaired the session on orbital disorder

- Thyroid related orbitopathy
- Scleral strip for frontalis suspension (Dr. C. P. Gupta best paper award)

Dr. P. Mohan

Co-chairman for the free paper session

Dr. R. Venkatesh

Videos:

- Phaco salute - a safe alternative for phacoemulsification in young patients with soft cataracts
- Manual Small Incision Cataract Surgery under topical anaesthesia
- Different techniques of flipping the nucleus into the anterior chamber in manual SICS

Dr. D. Datta

- Comprehensive eye care services in a district in Tamil Nadu

Dr. P. Sundaresan

- Research in ophthalmic genetics

Dr. P. Sathyan

- Phaco trabeculectomy - Flap vs No

flap as a primary procedure

- Video: Role of antimetabolites (5 FU & MMC) in glaucoma filtering surgery

Dr. R. Revathi

- Has the outcome of fungal keratitis changed with multiple antifungal agents?
- Glaucoma and CME after keratoplasty
- Principles of management of corneal / corneo - scleral tear
- Video interactive session: Surgical management of DM detachment

Dr. Kamal Preet

- Management of a bilateral vasculitis with CRVO

Dr. Kuldeep Srivastava

- Intraocular lens implantation in children – with video presentation
- Results of bilateral lateral rectus recession for exotropias
- Results of single medial rectus muscle recession

Dr. Manohar Babu

- Bilateral exudative RD in a young girl - case presentation

Dr. Shubra Sil

- Bilateral septic retinitis in a young adult male

Dr. Mahesh Kumar

- Bilateral acute retinal necrosis with retinal vasculitis and sclero keratitis

Dr. Raghuraman

- The other eye in RD
- Poster: Neovascularisation and capillary non-perfusion areas in DR - A FFA study

Dr. Maheswar B

- IOFB localisation

Dr. N. Sunil

- Retinal redetachment surgery under silicone oil
- Video: Vitrectomy under air - An effective technique

Dr. Arun Samprathi

- Binocular status after surgery for exotropias - Our experience
- Efficacy of probing in children above the age of three years

Dr. Shaunak Mukadam

- Pattern of infectious keratitis in children

Dr. Arunava Kundu



Dr. G. Natchiar the incoming president of TNOA giving a memento to Ln. Dr. Chandrashekhar Shetty



Dr. M.R.S. Ramakrishnan lighting the lamp at the TNOA conference

- LASIK - our experience

Dr. Saswat Ray

- Computerised videokeratographic patterns of keratoconus

Dr. Meenakshi

- Profile of corneal ulcer in South Tamil Nadu

Dr. S. Ramakrishnan

- Does vernal conjunctivitis cause astigmatism?

Dr. V. A. Jaison

- Single quadrant posterior subtenon anaesthesia for cataract and anterior segment surgery
- Complications of 1000 phaco emulsifications procedures
- Video: Single quadrant posterior subtenon anaesthesia for cataract and anterior segment surgery

Dr. Shamik Anil Ambatkar

- Dacryocystorhinostomy in rhinosporidiosis of lacrimal sac
- Causes of rhegmatogenous retinal detachment - A retrospective analysis

Dr. Anitha Raghavan

- Meibomian gland dysfunction - ocular manifestation and management

Dr. L. Srinivasan

- Efficacy of probing in adults with blocked naso lacrimal duct

Dr. Bipasha Mukherjee

- Surgical treatment of blepharophimosis syndrome

Dr. Haripriya

- Penetrating injuries with retained intraocular foreign bodies

Dr. Avnindra Gupta

- Visual prognosis following successful scleral buckling surgery in pigmented population

Dr. L.V. Shanmuganathan

- Manual phaco vs ECCE in phacolytic glaucomas

Dr. P.M.T. Mohaideen Abdul Kader

- Comparative study of primary trabeculectomy with and without mitomycin-C (0.04%) in phakic eyes

Dr. Bina Kulkarni

- Evaluation of visual outcome in cases of traumatic cataracts operated by manual Small Incision Cataract Surgery (SICS)

Dr. Minu Mathen

- Risk factors and agents involved and visual outcome of penetrating injuries of the eye

Mr. M. Jayahar Bharathi

- Traumatic corneal ulceration in South Tamil Nadu
- Poster: Corneal ulceration in the elderly in South Tamil Nadu

Dr. Vibha Gupta

- Incidence of posterior capsular opacification in Small Incision Cataract Surgery with canopener capsulotomy

Dr. Thushara Aluri

- Infectious keratitis associated with soft contact lens wear
- Poster: Diabetic maculopathy

Dr. T. Raveendra

- Posterior capsular opacification following IOL implantation in complicated cataract due to uveitis of various etiologies



Dr. K. Ananda Kannan delivering the inaugural address at the TNOA conference

Ms. Gowri Priya

- Use of PCR analysis for the elucidation of Mycobacterium tuberculosis

Posters:

Dr. B.L. Prabhu Gouda

- Evaluation of postoperative endophthalmitis cases (A retrospective study)

Dr. Vijay Kumar Ahuja

- Uveitic glaucoma: clinical presentation, etiology and management (Review of 16 patients - 24 eyes)

Dr. K. Sundaresh

- Amniotic band syndrome – A case report
- Case report of Nocardia endophthalmitis

Dr. P.S. Aruna

- X - Linked juvenile retinoschisis
- Dr. Rodney Morris
- Case report of a family of familial exudative vitreoretinopathy

SightFirst Seminar

Calicut, August 20

Dr. V. Narendran

- Eye camp activities of Aravind Eye Hospitals

Indian Medical Association Meeting

Nagercoil, August 20

Dr. R. Ramakrishnan

- Ocular manifestation of diabetes mellitus

CME Programme on Phaco and Refractive Surgery

Visaka Eye Hospital, August 27

Dr. M. Srinivasan

- Manual SICS
- Phaco in difficult situations
- PRK and LASIK
- Refractive surgery - future

At the Andhra Pradesh Medical College, Vishakapatnam he gave a talk on:

- Viral and parasitic keratitis

Eye Donation Meeting

Eagles Friends Club of Coimbatore, August 15

Dr. L.V. Shanmuganathan and Dr. V. R. Saravanan spoke on:

- The use of donated eyes for the corneally blind persons

Workshop on Manual SICS

H.V. Desai Eye Hospital, Poona, August 7, 2000

Dr. R. Venkatesh and Dr. V. Jaison attended.



Dr. Venkatesh as a guest faculty for the manual SICS workshop at H.V. Desai Eye Hospital, Poona

CME for Salem Ophthalmologist Association

Salem, September 3

Dr. R. Revathi

- Recent trends in the management of infective keratitis

Seminar/Live surgery on Small Incision Cataract Surgery and Phacoemulsification

Disha Eye Hospital and Ophthalmological Society of West Bengal, Calcutta, September 7-8

Dr. G. Natchiar

- Why SICS?
- Wound construction
- Basic steps
- Instrumental vs Manual phaco

Dr. R. D. Ravindran

- Capsulotomy and nuclear prolapse
- Phaco sandwich
- Cortex removal and IOL implant
- Wound and corneal complication

Dr. Anup Chirayath

- Nucleus expression with vectis
- Phacofracture
- Other complication

Geriatric Challenges in the New Millennium

State Level UGC sponsored Seminar

Fatima College, Madurai, September 7-8

Dr. G. Venkataswamy was the chairperson for the inaugural session, he spoke on:

- Geriatric challenges and eye care
- Mr. Keerti Pradhan
- Magnitude of ageing, health problems and challenges

Seminar / Live Surgery Small Incision Sutureless Cataract Surgery and Phacoemulsification

Gleneagles Hospital, Medan, Indonesia, October 7-8

Dr. G. Natchiar and Dr. R. Ramakrishnan attended. While there Dr. R. Ramakrishnan performed live surgery demonstration.

Dr. G. Natchiar

- Introduction to SICS
- Wound construction
- Surgical steps of SICS
- Learning curve of SICS
- When and how to convert?

Dr. R. Ramakrishnan

- Different types of capsulotomy and nucleus prolapse into the anterior chamber
- Various techniques of nucleus delivery from the anterior chamber
- SICS in glaucoma combined surgery
- SICS in difficult situations
- Basics of phaco and phacodynamics

Update on Cataract and Refractive Surgery

Coimbatore, October 1

Dr. R. D. Ravindran

- Small Incision Cataract Surgery - Manual phaco

Dr. G. Natchiar and Dr. R. Ramakrishnan with other participants at the Gleneagles Hospital, Medan, Indonesia



American Academy of Ophthalmology Meeting

Dallas, USA, October 21-25

Dr. P. Namperumalsamy

- Vision 2020
- Diabetic retinopathy in the international forum

CME on Infective Keratitis

Department of Ophthalmology, Calicut Medical College, Calicut, October 29

Dr. N.V. Prajna

- Presentation on infectious keratitis

Dr. R. Revathi

- Practiced management of viral acanthamoeba keratitis
- Peripheral ulcer keratitis - diagnosis and management

Southern Regional Ophthalmological Conference (SROC) 2000

Bangalore, November 3-5

Dr. P. Vijayalakshmi, Dr. P. Mohan and Dr. Anand Rajendran attended. Dr. P. Vijayalakshmi was there as the participation faculty and she also chaired the paediatric ophthalmology symposium and free paper session.

Dr. P. Vijayalakshmi

- Problems, decision making and surgical technique of congenital cataract

Dr. P. Mohan

- Postoperative endothelial cell loss following phacoemulsification and manual SICS
- Postoperative endothelial cell loss following secondary IOL implantation

Videos:

- Management of subincisional cortex in SICS
- Manual SICS in topical anaesthesia
- Scleral fixated PC IOL through subincisional in PXF case

Dr. Anand Rajendran

- Malignant melanoma of iris

Dr. Arun Samprathi

- A case of Ehlordanlos syndrome with ciliary staphyloma
- Optic neuritis in children - clinical presentation and visual

outcome

- Pattern of infectious keratitis in children
- Modifying incision architecture based on pre-existing astigmatism in phacoemulsification
- Converting to phaco - an ideal way

Annual Meet of Glaucoma Society of India

PGIMER, Chandigarh,

November 17-19

Dr. R. Ramakrishnan

- Practical aspects of glaucoma medical therapy

He also participated in the panel discussion on epidemiology, prevalence, diagnosis and management of glaucoma.

Dr. S.R. Krishnadas

- The glaucoma triple surgery

Dr. P. Sathyan

- Flap vs no flap in glaucoma phaco triple surgery

12th Oculoplastic Association of India

Cochin, November 19

Dr. Usha Kim

- Complications in orbital surgery

World Diabetic Day

Tuticorin, November 19

Dr. Mohaideen Abdul Kader

- Eye and diabetes

Kerala State Ophthalmological Society

Calicut, Kerala, December 1-3

Dr. M. Srinivasan

- Suppurative keratitis
- Management of dry eye

Dr. V.A. Jaison

- Nucleus management in SICS
- Complications of 1000 phacoemulsification procedures
- Posterior subtenon anaesthesia for cataract anterior segment surgeries
- Manual phaco using 26 gauge needle - A new technique
- Videos: Techniques of nuclear delivery

Informal Consultation on the Economic Analysis of Sensory Disabilities

convened by WHO

Geneva, November 28-29

The meeting focused on the economic aspects of hearing and vision impairment looking at the burden of disease and cost effectiveness of interventions. A selected few from those working in the field of hearing, vision and health economics were invited to this meeting. Mr. R. D. Thulasiraj chaired the meeting.

Symposium on Common Eye Diseases

Dr. Shroff's Charity Eye Hospital, New Delhi, December 3

Dr. Kuldeep Srivastava

- Congenital cataract

XII Afro-Asian congress of Ophthalmology

Guangzhou, China,



Dr. S. R. Rathinam with Prof. Peizeng Yang and Prof. Aize Kijilstra at Guangzhou, China

November 11-15

Dr. S.R. Rathinam

Chaired the Uveitis session and made a clinical presentation on:

- Leptospiral uveitis - six years study
- Video: Clinical presentation and laboratory diagnosis of leptospiral uveitis

Clairvoyance 2000

Tata Institute of Social Sciences, Mumbai, December 8

Mr. R.D. Thulasiraj

- Innovations in community ophthalmology - The Aravind Eye Hospital model

Symposium on Paediatric Cataract Surgery in the New Millennium

Dr. Shroff's Charity Eye Hospital,

Publications

Manual with CD and Video

Small Incision Cataract Surgery - an alternative technique to instrumental phacoemulsification.

Chief Author: Dr. G. Natchiar

Journals

British Journal of Ophthalmology, Vol: 84 (1), Jan 2000

Taylor, Craig J; Sheilla I Smith; Catherine H Morgan; Susan F Stephenson; Tim Key; Srinivasan M *et al*

- *HLA and Mooren's ulceration*, p.72-75

Indian Journal of Ophthalmology, Vol: 48 (1) Mar 2000

Rajakannan; Gayathri; Walimbe Prasad; Ramakrishnan R; Venkatesh Prajna N.

- *Kearns Sayre Syndrome: An atypical presentation*, p.54-55

Journal of Tamil Nadu Ophthalmology Association, Vol: 41 (1) Mar 2000

Lalitha Prajna; Celine George; Manimegalai; Venkatesh Prajna, N; Srinivasan, M.

- *Microbiological review of Nocardia endophthalmitis*, p.25-27

International Ophthalmology Clinics, Vol: 40 (2) Spring 2000

Rathinam, S.R.; Emmett T Cunningham

- *Infectious causes of uveitis in the developing world*, p.137-152

British Journal of Ophthalmology, Vol: 84 (5) May 2000

Dinesh K Sahu; Namperumalsamy, P; George F Hilton; Nolan F de Sousa.

- *Bullous variant of idiopathic central serous chorioretinopathy*, p.485-492

Arch. of Ophthalmology, Vol: 118 (4) Apr 2000

Andrew J. Lotery; Namperumalsamy, P; Samuel G. Jacobson; Richard G. Weleber *et al*

- *Mutation analysis of 3 genes in patients with Leber's congenital amaurosis*, p. 538-543

Journal of Kerala State Ophthalmological Society Vol: XII No (1) March 2000

Thulasiraj, R.D; Muralikrishnan, R.

- *Vision 2020: The global initiative for Right to Sight*, p. 30-32

Vol.XII No. (2) June 2000

Muralikrishnan R.

- *Quality management in eye care*, p.70-71

Journal of Tamil Nadu Ophthalmic Association, Vol: 41 (2) June 2000

Vijayalakshmi, P; Thulasiraj, R.D; Sumitha; Meenakshi Sharma; Namperumalsamy, P

- *Incidence of ocular disorders in preschool children*, p.69-76

Rajadurai Pandi, K; Arun Samprathi; Revathi, R; Kalpana Narendran

- *Pseudomonas and Nocardia keratitis associated with soft contact lens - A case report*, p.81-82

Minu Mathen, M; Seema Vishnu; Venkatesh Prajna, N;

Vijayalakshmi, P; Srinivasan, M

- *Congenital corneal anaesthesia*, p.83-86

British Journal of

Ophthalmology, Vol: 84 (8) Aug 2000

Whitcher, John P; Srinivasan, M.

- *Leprosy - a new look at an old disease*, p. 809

Journal of Cataract & Refractive Surgery, Vol: 26 (7) July 2000

Arup Chakrabarti; Seema Singh; Krishnadas, S.R.

- *Phacoemulsification in white cataract*, p. 1041-1047

British Journal of Ophthalmology, Vol: 84 (10) Oct 2000

Rathinam, S.R; Namperumalsamy, P; Emmett T Cunningham

- *Spontaneous cataract absorption in patients with leptospiral uveitis*, p. 1135-1141

American Journal of Ophthalmology, Vol: 130 (3) Sep 2000

Prajna Venkatesh, N *et al*

- *The Madurai intraocular lens study IV: Posterior capsule opacification*, p. 304-309.

Indian Journal of Ophthalmology, Vol: 48 (4) Dec 2000

Srinivasan, M; Vamshidhar, M and Gopal, R

- *Sodium bicarbonate – an alternative to hyaluronidase in ocular anaesthesia for cataract surgery*, p.285-290

Operative Techniques in Cataract and Refractive Surgery, Vol: 3, No: 4, Dec 2000

Govindappa Natchiar; Tulika Dabral Kar

- *Manual Small Incision Sutureless Cataract Surgery – An alternative technique to instrumental phacoemulsification*, p.161-170

Community Eye Health, Vol: 13, No. 34, 2000

Thulasiraj, R.D; Saravanan, S

- *Productivity: Getting cataract*

Lions Aravind Institute of Community Ophthalmology focuses on providing eye care services through teaching, training, research and consultancy. The institute is also involved in developing and implementing sustainable eye care programmes both nationally and internationally.

Consultancy for Capacity Building

LAICO offers consultancy to develop the capacity of other eye hospitals. This is done through a systematic process comprising of needs assessment visits, capacity building workshop and follow-up visits. Regular monitoring and additional inputs are provided through Skill Development and Standardisation Workshops.

In the past year the number of hospitals working in partnership with LAICO has increased dramatically from 84 to 114 which includes eye hospitals in Africa and South-East Asia.

LAICO offers consultancy support to the following eye hospitals:

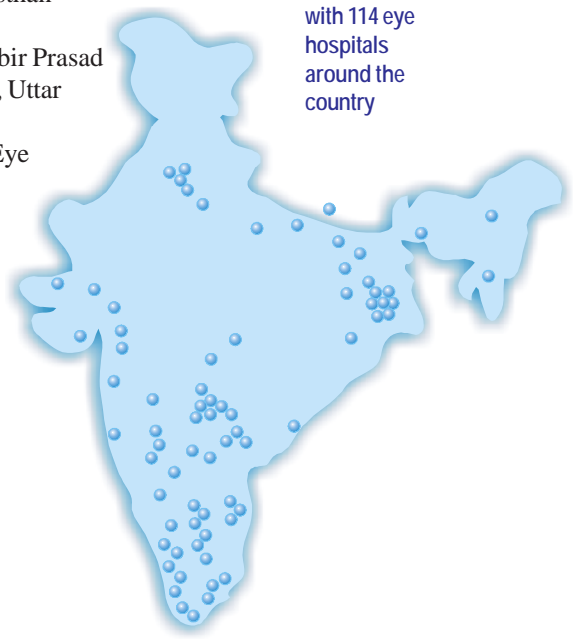
Lions Eye Hospitals

1. Dr. Ranga Reddy Lions Eye Hospital, Secunderabad, Andhra Pradesh
2. Lions Eye Hospital, Hyderabad, Andhra Pradesh
3. Silchar Central Lions Eye Hospital, Silchar, Assam
4. Jorhat Lions Eye Hospital, Assam
5. Lions RK Memorial Eye Hospital, Dhanbad, Bihar
6. Gujarat Blind Relief and Health Assoc. Eye Hospital, Chikhodara, Gujarat
7. Lions Eye Hospital, Koppal, Karnataka
8. Lions Eye Hospital, Chintamani, Karnataka
9. Lions Eye Hospital, Jaora, Madhya Pradesh
10. Udayachal Charitable Eye Hospital, Rajnandgaon, Madhya Pradesh
11. Lions Eye Hospital, Sagar, Madhya Pradesh
12. Labh Muni Lions Eye Hospital, Mandsaur, Madhya Pradesh
13. Lata Mangeshkar Lions Eye Hospital, Nagpur, Maharashtra
14. Lions Tarachand Baba Hospital, Mumbai, Maharashtra
15. Lions Sital Prasad Jain Eye Hospital and Diagnostic Centre, Dahisar, Maharashtra
16. Rourkela Vedvyas Lions Eye Hospital, Rourkela, Orissa
17. Lions Eye Hospital, Jalandhar, Punjab
18. Lions Eye Care Centre, Jaitu, Punjab
19. Rani Lions Eye Hospital, Rani, Rajasthan
20. Bhilwara Lions Eye Hospital, Bhilwara, Rajasthan
21. Lions Club of Madras (Host) Shri Maganlal Hansraj Eye Hospital, Chennai, Tamil Nadu
22. KG Eye Hospital, Coimbatore, Tamil Nadu
23. Lions Eye Hospital, Balrampur, Uttar Pradesh
24. Lions Eye Hospital, Gaziabad, Uttar Pradesh
25. Maharani Laxmibai Memorial Eye Hospital, Jhansi, Uttar Pradesh
26. Sawhney Lions Eye Hospital, Rampur, Uttar Pradesh
27. Lions Eye Hospital, Alipurduar, West Bengal
28. Siliguri Greater Lions Eye Hospital, Siliguri, West Bengal
29. Dhaka Progressive Lions Eye Hospital, Narsingdi, Bangladesh
30. Jyoti Manav Seva Sansthan Hospital, New Delhi
31. Gandhi Shatabdi Mahabir Prasad Eye Hospital, Mirzapur, Uttar Pradesh
32. Panagarh Bazar Lions Eye Hospital, West Bengal
33. Lions Club of Idar and SBNSSPVM Eye Hospital, Idar, Gujarat
34. Lions Eye Hospital, Medak, Andhra Pradesh
35. Lions Eye Care Centre, Kathmandu



LAICO Faculty
Mr. Keerti Pradhan,
Mr. Muralikrishnan,
Mr. A.K. Sivakumar and
Mr. S. Saravanan

LAICO works
with 114 eye
hospitals
around the
country



36. R.M. Kedia Eye Hospital, Birganj, Nepal
37. Lions Charitable Eye Hospital, The Chittagong Lions Foundation, Bangladesh
38. Lions Eye Hospital, Bangladesh Lions Foundation, Dhaka, Bangladesh
39. Lions SightFirst Eye Hospital, Nairobi, Kenya
40. Lions Eye and Blood Centre, Mombassa, Kenya

Mr. R. D. Thulasiraj
and
Ln. N.A.K. Gopala-
krishnaraja in
Bangladesh



Dr. D. Shukla and
Mr. Keerti Pradhan
at the Jamshedpur
Eye Hospital, Tata
Nagar



Dr. P. Sathyan
demonstrating SICS
at Kotagiri Medical
Fellowship Hospital,
Tamil Nadu



Dr. A.K. Chowdhry,
Mr. A.K. Sivakumar
and
Mr. R. Meenakshi
Sundaram,
with Lion members
and staff of Lions Eye
Care Centre,
Kathmandu



41. Lions Upkar Netra Chikitsalaya, Lakhimpur Kheri, Uttar Pradesh
42. Burdwan Lions Eye Hospital, West Bengal
43. Melvin Jones Lions Eye Hospital, Cuttack, Orissa
44. Lions Club of Imphal, Manipur
45. Lions Rajkot Race Course Eye Hospital, Gujarat
46. Lions Eye Care Trust Hospital, Dharmavaram, Andhra Pradesh
47. Lions Eye Care Centre, Dolakha
48. Calcutta Lions Netra Niketan, Calcutta, West Bengal
49. Howrah Lions Hospital, Howrah
50. Lions Club of Karimnagar Charitable Eye Hospital, Karimnagar, West Bengal
51. Lions Karnavati Shantaben Vishnubai Patel Eye Hospital, Karnavati, Gujarat
52. Lions Hospital and Research Centre, Khizrabad, New Delhi
53. M. Ram Reddy Lions Eye Hospital, Mahabubnagar, Andhra Pradesh
54. Lions NAB Eye Hospital, Miraj, Maharashtra
55. Mysore Race Club Eye Hospital, Mysore, Karnataka
56. Smt. Rajeswari Ramakrishnan Lions Eye Hospital, Nidadovole, Andhra Pradesh
57. Rajvalli Radharaman Lions Eye Hospital, Palakol, Andhra Pradesh
58. Raniganj Lions M.J. Memorial Lions Eye Hospital, Raniganj, West Bengal
59. Sadharam Eye Hospital Charitable Trust and Postgraduate Institute of Ophthalmology, Sadharam, Andhra Pradesh
60. Lions Club of Secunderabad Eye Institute, Secunderabad, Andhra Pradesh
61. Lions Club of Suryapet Eye Hospital, Suryapet, Andhra Pradesh
62. Lions Eye Hospital, Tiruvarur, Tamil Nadu
63. Smt. Vallabhaneni Sitamahalakshmi Lions Eye Hospital, Vijayawada, Andhra Pradesh
64. Viramgam Sarvajanic Eye Hospital, Viramgam, Gujarat

Sight Savers Supported Hospitals

1. Rotary Netra, Vizag, Andhra Pradesh
2. Muzaffarpur Eye Hospital, Muzaffarpur, Bihar
3. Jamshedpur Eye Hospital, Bihar
4. CMRM Rotary Eye Hospital, Giridih, Bihar
5. Shree Jalaram Seva Mandal Trust, Bodeli, Gujarat
6. Nandlal Mulji Bhuta Medical Foundation, Sihor, Gujarat
7. Kutch Vikas Trust, Bhuj, Gujarat
8. Arpana Research & Charities Trust, Karnal, Haryana

9. Vishwa SEVA Samiti, Sirsi, Karnataka
10. Chhattisgarh Eye Hospital, Raipur, Madhya Pradesh
11. Bhopal Eye Hospital, Bhopal, Madhya Pradesh
12. Venu Eye Hospital, New Delhi
13. JPM Rotary Eye Hospital, Cuttack, Orissa
14. Gandhi Mission Trust, Daspur, West Bengal
15. Vivekananda Mission Ashram, Haldia, West Bengal
16. Budge Budge Welfare Trust, Calcutta, West Bengal
17. Sri Sri Bijoykrishna Ashram Relief Society, Ramchandrapur, Purulia, West Bengal
18. Rotary Service Centre, Purulia, West Bengal
19. Community Service Trust, Vuyyuru, Andhra Pradesh
20. PTSJMCC, Petarbar, Bihar
21. Khairabad Eye Hospital, Uttar Pradesh
22. URMUL Jyoti Sansthan Nokha, Bikaner, Rajasthan
23. Mahatma Gandhi Eye Hospital, Mayurbhanj, Orissa

CBM SARO (S) Supported Hospitals

1. CSI Redfern Memorial Hospital, Hassan, Karnataka
2. Malankara Orthodox Syrian Church Medical Mission Eye Hospital, Kariambady, Kerala
3. H.V. Desai Eye Hospital of Poona Blind Men's Association, Pune, Maharashtra
4. Wanless Hospital, Miraj, Maharashtra
5. St. Luke's Eye Care Hospital, Nazareth, Tamil Nadu
6. Good Samaritan Eye Hospital, Matrapalli, Tamil Nadu
7. Kotagiri Medical Fellowship Hospital, Kotagiri, Tamil Nadu
8. CSI Kalyani General Hospital, Chennai, Tamil Nadu
9. Schieffelin Leprosy Research and Training Centre, Karigiri, Tamil Nadu
10. Scudder Memorial Hospital, Ranipet, Tamil Nadu

11. Lutheran Eye Hospital, Dharapuram, Tamil Nadu
12. Vizhiyagam Eye Hospital, Sivagangai, Tamil Nadu
13. Vision Eye Hospital, Hubli, Karnataka
14. Dr. Somervel Memorial CSI Mission, Karakonam, Kerala
15. Institute of Ophthalmology, Josephs Eye Hospital, Trichy, Tamil Nadu
16. Medical Brother St. Johns Hospital, Kattappana, Idukki, Kerala
17. Leprosy Relief Rural Centre, Chettipatty, Salem, Tamil Nadu
18. C.S.I. Campbell Hospital, Jammalamadugu, Andhra Pradesh
19. ALC Pakayanathan Memorial Eye Hospital, Chengam, Tamil Nadu



Mr. S. Saravanan and Dr. P. Sathyan with Ln. A.K. Banerjee, Administrator, Lions SightFirst Eye Hospital, Nairobi, Kenya

Seva Supported Eye Hospitals

1. Sitapur Eye Hospital, Bahraich, Uttar Pradesh, India
2. King Mahendra Memorial Eye Hospital, Bharatpur, Nepal
3. Nepal Eye Hospital, Kathmandu, Nepal
4. Provincial Hospital, Siem Reap, Cambodia

International Eye Foundation

1. Centre for Sight, Sofia, Bulgaria
2. Lions SightFirst Eye Hospital, Lilongwe, Malawi

Other Hospitals

1. Jnana Prabodhini Medical Trust's Smt. Kamala Mehta Hospital, Satara, Maharashtra
2. K.B. Haji Bachooali Charitable Ophthalmic & E.N.T Hospital, Mumbai

Workshops and Visits profile - 2000

Workshop	No. of Workshops	Hospitals	Participants
Manpower and Management Development	2	13	56
Standardisation	1	8	28
Skills Development	1	6	15
Management and Planning Support for Establishing New Eye Hospitals	2	12	38
Needs Assessment and Follow-up Visits were made to 94 hospitals			

Other Workshops and Seminars

Strategic Planning Workshop

March 16-17

A strategic planning workshop was held with the Sight Savers International (SSI) team consisting of Mr. Martin Kyndt, Deputy Director Overseas Programme, Ms. Wilma Van Berkel India Programme Officer (UK), Ms. Alice Crasto Regional Director and Mr. Thanawala, Director, Finance and Administration.

CBM Software Workshop

April 18-19

LAICO has long advocated the benefit of computerising the patient management process and other administrative tasks in the hospitals. It also offered to develop a software package that could be used in different hospital settings. CBM came forward to fund this project. As part of the software development, a workshop was held to demonstrate the scope and capability of the package. The following nine eye hospitals participated in the workshop with a total of 16 participants.

- Joseph Eye Hospital, Trichy, Tamil Nadu
- Lutheran Eye Hospital, Dharapuram, Tamil Nadu
- Vizhiyagam Eye Hospital, Sivagangai, Tamil Nadu
- Malankara Orthodox Syrian CMM, Kariambadi, Kerala
- Malankara Orthodox Syrian CMM, Kolencherry, Kerala
- St. Johns Hospital, Kattapana, Kerala
- Sri Bijoy Ashram Relief Society, Netaji Eye Hospital, Calcutta, West Bengal
- Vishwa Seva Samiti, Rotary Charitable Eye Hospital Building, Sirsi, Karnataka
- Netra Nirmay Niketan, Vivekananda Mission Ashram, Medinipur, West Bengal

SightFirst 741 - Curriculum Development Workshop

June 5-6

A two day workshop was held to develop a training framework which will help in effectively planning and supporting the establishment of new eye hospitals or reviving existing eye hospitals that are currently non-functioning. Developing a detailed content for the one week training programme envisaged under SightFirst- 741 was focused on. Besides the

LAICO staff, the key members who participated were Ln.M. Nagarajan, International Director and Project Chairman Ln. NAK Gopalakrishna-raja, Grant Administrator, Technical Advisors of the Lions Multiple Dist 322, 323 and 324, Mr. D. Nagarajan, Visiting Faculty, Ln. S.M. Miskeen, Chairman of Thiruvarur Lions Eye Hospital, Swami Biswanath-anandaji, Secretary of Vivekananda Mission Ashram, and Mr. Israel Gnanaraj, Chief Architect of Auroservice.

Vision 2000 – Preventable Blindness

August 27

A seminar was organised by the Rotary International District 3000, in which over 35 Rotary members participated. The objective of the seminar was to provide a wide exposure to the participants, regarding the magnitude and problem of blindness in India which will help them organise effective eye care awareness programmes. During the seminar, a team of Aravind doctors spoke about the various major causes of blindness in India.

Seminar on SightFirst Programme

September 24

The Seminar on SightFirst was organised at LAICO for members of Lions Clubs International District 324 B3 in which about 200 of them participated. The overall aim of the seminar was to develop a basic understanding of the eye care and community outreach programme, which will facilitate the conduct of the SightFirst programme more effectively.

Training Programmes

LAICO offers management courses, intensive skill development courses and customised external training courses.

Management Courses

The following management courses are offered in affiliation with the Madurai Kamaraj University

Postgraduate Diploma in Hospital Management

This one year course is offered by LAICO with the diploma being awarded by Madurai Kamaraj University. Currently a total of nine students from various parts of India are attending this course.

Workshop on Management of Eye Hospitals

A one-month training programme for personnel involved in management and administration of eye hospitals was introduced. Two such workshops were held in March and November during the year 2000. A total of 15 candidates from 15 hospitals including hospitals from other countries such as Kenya, Nepal, Bangladesh and Bulgaria participated.

Intensive Skill Development Courses

Instruments Maintenance Course

The Instruments Maintenance courses have gained considerable recognition in India and elsewhere during this year. At the end of the year 2000, the number of technicians trained stands at 120. This year six courses were conducted, training a total of 35 technicians. Two of them were special courses, one of them exclusively for the technicians of Karnataka state under the Karnataka Health System Development Project (KSHDP) sponsored by the Danish Assistance for the Prevention and Control of Blindness (DANPCB). Karnataka sent their personnel from the District level hospital, Instrument maintenance department for undergoing training in maintenance of ophthalmic instruments and equipment. This special course was reviewed by Dr. Shamanna, Joint Director of Health (Ophthalmology), Karnataka and Mr. Vaidyanathan, Chief Advisor, DANIDA - (DANPCB). The other special course was for technicians from Ghana and Nigeria who were also trained as trainers to run similar courses in West African countries. Prof. V. Srinivasan, Consultant, Instruments Maintenance Laboratory and Mr. S. Poornachandran, Senior Technician were invited as resource persons by the West African Health Community to establish an instruments maintenance facility and to run the premier instruments maintenance course at the National Eye Centre, Kaduna, Nigeria. This was sponsored by Sight Savers International. Nine technicians were trained in that course - 2 from Gambia, 2 from Ghana and 5 from Nigeria. Five African technicians trained as trainers at



Aravind earlier served as co-faculty in this course.

Certificate Course on Community Outreach and Social Marketing of Eye Care Services

This course is offered twice a year during the month of June and December for camp managers and co-ordinators. This year a total of 16 candidates from different parts of India and Nepal participated. Apart from community outreach strategies, the course also teaches patient counselling and social marketing.

Customised External Training

Training to Govt. Health Officers on NPCB (National Programme for Control of Blindness)

Gandhigram, May 9

LAICO and Aravind Eye Hospital, Madurai was requested by Gandhigram Institute of Rural Health and Family Welfare (GIRH & FW) to take classes for the District Health Officers from Southern States in India. The audience included Chief Medical Officers and Chief District Medical Officers from Karnataka, Kerala and Tamil Nadu.

With community ophthalmology as the key area of focus, the faculty was a

Mr. G. Srinivasan with the participants of the SF 741 Lions Management and Planning Support Workshop for Start-up Hospitals

participants of Management of Eye Hospitals Course with Aravind and LAICO staff





participants of Community Outreach Course with faculty and Chairman of Aravind Eye Hospitals

multidisciplinary team consisting of Dr. Thiruvengada Krishnan, Mr. R. Meenakshi Sundaram, Mr. Muralikrishnan, Mr. Keerti Pradhan, and Mr. Kaliyaperumal.

Customer Service in Hospitals – A Seminar
LAICO, August 19 and 20

In response to a special request, a one-day seminar on “Customer Service in Hospitals” was conducted for the TVS Hospital staff by Mr. A.K. Sivakumar. Twenty one members attended.

Short Course on Community Ophthalmology
September 4-15

A nine-member team of eye care professionals from Philippines underwent community ophthalmology training at LAICO coordinated by Mr. Keerti Pradhan.

the third batch of Filipinos with some of the senior management staff of Aravind



students from the University of Michigan, USA working on their project



MIS Training

Mr. Prakash Parajuli from NNJS, Nepal underwent three months training at LAICO on MIS.

Orientation to DHAN Academy Students

A group of 20 students were given orientation on Aravind Eye Hospital’s compassionate services and sustainable management.

Project Students at LAICO

LAICO offers opportunities to students of various disciplines like computer applications, business management and hospital management to do project work. In the year 2000, students from various parts of the country and abroad were here to undertake various projects.

from University of Michigan, USA

First year MBA students Dr. Matthias Spanle, Ms. Anna Schocket, Ms. Rebecca Darr and Mr. Sarvin Patel – Project: Developing a conceptual model for management reporting and control process, specifically observing materials management at Aravind.

from Madurai Kamaraj University, Madurai

- Ms. R. Anandha Lakshmi, M.Sc Computer Science - Project: Centralised Quality Control System
- Ms. Deepa, MHM - Project: Quality Audit in In-patient Care
- Ms. S. Kavidha, MHM - Project: Training Needs Analysis for Nursing Staff

from Rice University, Texas, USA

- Mr. Sudeep Pramanik, MD/MBA candidate - Project: Branding of Aravind Eye Hospitals

Other Visits by LAICO staff

Symposium on Visual Functioning Assessment in Clinical and Observational Research

Natcher Conference Centre, National Institute of Health, Bethesda, November 13- 14

The symposium was organised to share the experience of different research groups who have been utilising the ‘National Eye Institute (NEI) – Visual Functioning Questionnaire’

(VFQ)'. The validity and reliability of the questionnaire as well as methodological issues in using the questionnaire and the relevance of visual functioning assessments was discussed. Currently the NEI-VFQ questionnaire is being used for clinical trials, evaluation of health education interventions, study of eye diseases among distinct ethnic groups, and in observational studies. The representatives working on the Indian Visual Function Questionnaire (IND-VFQ) were invited by NEI to participate in the conference as well as to have a meeting with the technical advisory committee for the study. IND-VFQ is being developed through a multi-centric study carried out with R. P. Centre for Ophthalmic Sciences, Delhi; Sarojini Devi Regional Institute of Ophthalmology, Hyderabad; and Aravind Eye Hospital, Theni. These study centres were represented at the conference by Dr. V. K. Dada, Dr. G.V.S Murthy, Dr. Sanjeev Gupta, Dr. K. Viswanath, and Ms. Preethi Pradhan as well as the external consultant for the study Dr. Astrid Fletcher from London School of Hygiene and Tropical Medicine.

Board of Trustees Meeting at Gandhigram Institute of Rural Health and Family Welfare (GIRH and FW)

Gandhigram, September 2
Mr. Keerti Pradhan, representing Aravind Eye Hospital, attended the Board of Trustees meeting. The key objective was to analyse the opportunities and possibilities on the part of GIRH & FW to innovate and run health and development courses and take decision regarding the same. Discussion also centered on starting self-financing, self-employment courses.

Visits to Eye Hospitals in which Seva is involved

March 6-12

Mr. Keerti Bhusan Pradhan visited the following hospitals with Ms. boona cheema, Board Co-chair, Seva Foundation, USA

- Sitapur Eye Hospital, Bahraich, Uttar Pradesh
- Lumbini-Rana Ambika Eye Hospital, Bhairahawa, Nepal
- The satellite clinic of LRAEH, Tansen, Nepal

- Lions Eye Hospital, Tansen hills, Nepal

Seminar on Education and Training in Health Care organised by British Embassy

Hyderabad, March 1

Dr. P. Namperumalsamy participated.

Dissemination Workshop on Establishment of National Eye Care Resource Centre (NECRC) DANPCB

New Delhi, March 2-3

Dr. P. Namperumalsamy participated.

Seva Board Meeting

San Fransico, May 15-20

Dr. G. Natchiar and Mr. R. D. Thulasiraj attended.

San Anselmo, November 8-10

Dr. G. Natchiar and Mr. S. Saravanan attended.

Performance Appraisal Workshop

Ecumenical Training Centre, White Field, Bangalore, June 8-9

Mr. S. Saravanan, Ms. Maxine Harrington, Sr. Alice Mary and Sr. Annammal attended.

Indian Council of Medical Research (ICMR) Meeting

New Delhi, August 28

Dr. P. Namperumalsamy attended.

Investigators Meeting for the Levofloxacin Phase III study and the International Symposium on Ocular Pharmacolgy and Pharmaceutics (ISOPP)

Lisbon, Portugal, February 10-13

Dr. M. Srinivasan participated.

Developmental workshops for Aravind and LAICO staff

Skill Development Training

Computer training was given to the staff of Aravind-Madurai and LAICO on basic concepts of using computers and methods to solve problems related to computer usage.

Human Resource Development Workshops

Ms. Maxine Harrington, HRD Advisor and Volunteer Services Overseas volunteer conducted Problem Solving Workshop for nurses, nursing co-ordinators and nursing supervisors of refraction, out-patient department, wards and operation theatre to train them in skilled decision making and problem



Dr. M. Srinivasan with the chief of the Institute of Ophthalmology, Lisbon, Portugal



Ms. Catherine Moore, Seva Volunteer with some of the Aravind and LAICO secretaries and coordinators

solving.

Role Clarity Workshop was conducted for the middle management and supervisory staff of all the Aravind institutions and for the clinic/unit heads of Aravind Eye Hospital, Madurai. The workshop helped them clarify their role and responsibilities and identify support needed to undertake the expected role.

Developmental Training for Office Secretaries and Co-ordinators

The secretaries and co-ordinators of Aravind Eye Hospital and LAICO were trained by Ms. Catherine Moore, Seva Volunteer, USA. They had an opportunity to clarify their role, identify problems faced and explore solutions to tackle those problems.

5-S (Seiri, Seiton, Seiso, Seiketsu, Shitsuke) Activities and Best Practices

Hotel Pandyan, Madurai, May 19

The workshop was conducted by the Confederation of Indian Industry (Southern Region). It focused on implementation of 5-S activities in various departments of an organisation like maintenance of resources, recycling of wastage, maintenance of checklist of activities which will ultimately enhance effective working. Ms. V.S. Asharani, Ms. A. Padmavathi, Ms. Kanchanamala, Ms. T.M. Samundeeswari and Mr. K. Lakshmanan attended.

Mr. S. Saravanan at the training course in the School of Public Health, University of California, Berkeley



Workshop on WINISIS

Sarada Ranganathan Endowment for Library Science, Institute of Information Studies, Bangalore, August 23-27
Ms. Hepzibah and Mr. Kirubanithi attended.

International Practitioner in Residence Program

Mr. S. Saravanan, Faculty, LAICO spent over a month in USA to attend the International Practitioner in Residence Program a residency training course which the School of Public Health (SPH), University of California, Berkeley and several collaborating organisations in the San Francisco Bay Area had developed. The programme integrated training for public health practitioners from developing countries with the school's educational and internship activities for MPH (Masters in Public Health) students enrolled in International Health. Seva Foundation, USA and LAICO nominated Mr. Saravanan, to be the first practitioner in their residency programme. Besides attending sessions by eminent persons he was able to assist in teaching the unit named "Health Practice in the Developing Countries" for the MPH students in international health specialisation, using case study as a teaching methodology, learnt how curriculums were developed. At the residency programme Mr. Saravanan was able to collect lot of training modules and materials, which can be used while teaching short courses at LAICO.

During his stay he also got opportunities to visit different organisations and got a good exposure to various programmes. At Kaiser Permanente he met many specialists related to hospital management and training. He received inputs specifically on evaluating training programmes, developing courses and designing curriculum, physician management training, mentoring programme, measuring outcomes and quality programmes that lead to accreditation. He attended a one day course on 'Achieving Service Excellence' and a three days course on 'Orientation to New Managers'. He also witnessed video conferencing sessions and other teaching methods like Roots Learning, etc.

He visited the Golden Gate University, San Francisco where he got inputs on designing

modules for cyber learning. At the American Academy of Ophthalmology (AAO), San Francisco, he learned about the activities of AAO. Dr. Jane A. Aguirre, Vice President, Ophthalmic Practice and Services, detailed the process on Preferred Practices and also provided the draft summary of new Preferred Practice Pattern (PPP).

Training for National Blindness Survey Teams

Following the successful completion of 2 surveys on blindness and outcome of cataract intervention in one representative district each of Tamil Nadu and Rajasthan, it was decided by the Ministry of Health, Government of India to extend the survey to cover the remaining 13 major states. The objective of this National Survey is to estimate the prevalence of blindness, its major causes and evaluate the outcome of the cataract intervention programme. Since Aravind and LAICO have had the experience of conducting two such surveys and had also developed the survey protocol used in these surveys, the Government of India requested LAICO to carry out the training for six survey teams from Regional Institutes of Ophthalmology of Calcutta, Hyderabad and Bangalore, Vivekananda Mission Ashram, West Bengal, JIPMER Pondicherry and Aravind-Coimbatore. The training workshop was conducted from December 18-21. The training included classroom sessions and actual fieldwork followed by evaluation of the fieldwork.

Support to Aravind Quality Management

- As part of the Quality Management initiative a seminar on 'Introduction to Quality Management' was conducted for the quality council members by Ms. Bonnie Carl, Seva Volunteer, USA.
- An in-house training on 'Quality Service' was conducted for the medical staff at Aravind-Madurai.
- Quality audits were initiated in the areas of admission, communication, safe medication, documentation, pre and postoperative care, discharge and patient counselling.

- Staff suggestion scheme was also introduced to enhance the participation of the staff.
- An in-house training 'Customer Service' was organised for the Lakshmi opticals staff.

Volunteer Programme

LAICO coordinates the volunteer programme for all the institutions of Aravind Eye Care System. Currently the volunteers are sourced from Zurich Financial Services, Seva Foundation – US and Canada. They have helped our organisation in different ways like training, establishing a new project, system development, modification or implementation and organisational development. They continue to be a rich source for the organisation's sustainable development and growth. The number of volunteers has progressively increased with the growth of the institution. This year saw the appointment of a Volunteer coordinator and the bringing out of a Manual for Visitors and Volunteers called 'Attune'. Twice a year the India Programme Co-ordinator from Zurich Financial Services (ZFS) Mr. Darren O' Connor visits LAICO and Aravind Eye Hospital, Madurai not only to assess future requirement of volunteers but also to monitor the inputs received from earlier volunteers. Coinciding with each visit is a Partners Meeting hosted by one of the ZFS partners. During the first meeting the volunteer process of Aravind and the partnership organisation was streamlined.

Zurich Financial Services India Programme: Partners Meeting

Chennai, October 12-13

The bi-annual partners meeting of the ZFS was hosted by the Spastics Society of Tamil Nadu (SPASTN). Aravind Eye Hospital was represented by Mr. Keerti B. Pradhan and Ms. Preethi Pradhan. A total of 8 NGO's all based in South India attended the meeting. ZFS was represented by the new Director of Community Affairs Trust - Mr. Christopher Staples, the Programme Manager, Ms. Linda Perry and India Programme Co-ordinator Mr. Darren O' Connor. A training needs analysis of each organisation was carried out, which was followed by identifying which training can be provided by each partner.

Aravind Centre for Women, Children and Community Health

The Aravind Centre for Women, Children and Community Health established with an aim to combat nutritional related blindness, continues its work offering increased number of outreach services and training programmes in rural areas.

As part of the consultancy offered to the staff of Association of Sarva Seva Farms (ASSEFA) in Kariyapatty, the primary school teachers were trained on detection of mental and emotional problems in school children. Several meetings were conducted with their staff and local village leaders regarding the health education project. The Commissioner of Social Welfare Board has offered to provide full support to the Health Education Project.

A five-member team from the Foundation for Revitalization of Local Health Tradition (FRLHT) visited the centre. Mr. R. D. Thulasiraj addressed the FRLHT staff on “Basic Principles of Management”.

A Nutrition Network meeting sponsored by UNICEF was conducted by ACWCCH at LAICO on January 27. The meeting focused on developing strategies to eliminate malnutrition in children of Tamil Nadu and Kerala, and to create awareness on the economic loss due to malnutrition and to generate public interest in supporting the programme. Over 50 participants attended the meeting. Dr. Rajammal Devadas, Vice Chancellor, Avinashilingam University, Coimbatore gave the presidential address. Dr. Lakshmi Rahmathullah presented the scenario of the nutrition problem and drew attention to economic loss due to malnutrition in children. Mr. P.T.R. Palanivel Rajan, Speaker of Tamil Nadu Assembly addressed the participants. Mrs. Isabella Austin, State Representative for Tamil Nadu and Kerala, UNICEF, Chennai also attended the meeting.

Dr. Barry Jones and Ms. Dorothee, Nurse Neurology visited the centre during this year. They trained Dr. Paulraj to use the audio meter machine and he is now testing the feasibility of conducting a study to detect hearing impaired children.

Dr. Lakshmi
Rahmathullah with
Mr. P.T.R. Palani-
vel Rajan, Speaker
of Tamil Nadu
Assembly and
Dr. Rajammal
Devadas, Vice
Chancellor,
Avinashilingam
University,
Coimbatore

Vitamin A Supplementation in Newborns (VASIN) Study

The VASIN project is now in its third year of inception. During the year 2000 the progress of the project was quite tremendous with excellent community participation. The second VASIN Data and Safety Monitoring Committee (DSMC) meeting was held at Chennai on December 4-5, 2000. Representatives from the Tamil Nadu Public Health

Department and the committee members attended the meeting. With all the data obtained, the committee concluded that the study is being carried out as per the ethical norms of the protocol with a high follow-up rate. Further it was recommended that the study follow-up could be stopped by March 2001.



On October 9, 2000 a meeting was held at LAICO with the Field supervisors and Block officers. Mr. R.D. Thulasiraj, Dr. Lakshmi Rahmathullah and Mr. Keerti B. Pradhan discussed the possibility of various research publications that could be brought out from the existing data. Also opportunities for expanding this research project for larger public health areas was discussed.

As an ideal stepping stone to this Dr. Lakshmi Rahmatullah went to US from October 19 to November 7, 2000 to meet people and visit various potential funding agencies for starting new projects on health education and nutrition. In Orbis she discussed about conducting a survey on 'Childhood eye diseases and the preventive measures' and setting up clinical services to meet these demands. She also explored the possibilities of collaboration with universities like the Harvard University, Boston and Helen Keller Institute.

Meetings Attended

Dr. Lakshmi Rahmatullah

- Regional Workshop organised by Government of India and UNICEF, Chennai, February 15 –16.
- Working with communities to improve nutrition and food security, organised by Co-operative American Relief Everywhere (CARE) India, Delhi, March 6-8.
- Nutrition Network Executive Committee meeting, Chennai, April 28.
- Tamil Nadu Voluntary Health Association (TNVHA) meeting, Chennai to review the health programme, April 29.



Dr. Paulraj
examining children
at the centre

Patient Statistics - 2000

Out-patient visits	-	13,803
Children below 5 years	-	1,110
Adult cases seen	-	667
Antenatal cases seen	-	26

Immunisation

DPT	-	437
OPV	-	574
AMV & MMR	-	211
Polio Drops	-	886

Vitamin A deficiency cases

XN & X ₁ b	-	10
Corneal xerosis	-	4
Keratomalacia	-	12
Corneal scar	-	1

Research Projects

Apart from several epidemiological surveys and intervention studies, laboratory based research work has been on the increase in the last two years. This has been made possible by the establishment of well equipped ophthalmic research laboratories under the department of ophthalmic genetics and immunology. The Tamil Nadu MGR Medical University has recognised Aravind Eye Hospital for Ph.D studies. Dr. P. Namperumalsamy, Dr. G. Natchiar, Dr. VR. Muthukkaruppan and Dr. P. Sundaresan have been recognised as supervisors in the field of ophthalmology, immunology and genetics.

Ongoing Research Projects

Blindness Prevalence Study and Evaluation of Cataract Intervention Programme in Tirunelveli District

Collaborators : National Eye Institute, Bethesda; World Health Organization; Aravind Eye Hospital, Tirunelveli and Lions Aravind Institute of Community Ophthalmology

Duration : January to September 2000

This study aims to determine the prevalence of blindness and to evaluate the cataract intervention programme in Tirunelveli district. The study was carried out in 28 urban/rural clusters, randomly selected to represent the district. A total of 5,411 people who were 50 years or older were examined resulting in a high coverage of 93.4% of the enumerated population. The detailed analysis of the study has been completed. The survey showed a high blindness prevalence of 11% in those 50 years or older and the overall cataract surgical coverage was 57%. Both these estimates indicate that a lot more work remains to be done in the district of Tirunelveli.

The Data and Safety Monitoring Committee Meeting of the Cataract Programme Evaluation Study at Tirunelveli was held on March 24 at LAICO and was attended by: Dr. Leon Ellwein, NEI, USA; Dr. Zhao, Peking Union Medical College Hospital, China; Dr. Sergio Munoz, University of Forntera, Chile; Dr. Dominic Negrel, WHO, Geneva and Dr. Pokhrel, Himalayan Eye Foundation, Nepal

Palghat Blindness Survey

Collaborators : Ministry of Health, New Delhi; Aravind Eye Hospital, Coimbatore and Lions Aravind Institute of Community Ophthalmology

Duration : December 2000 to May 2001

As a part of the National Blindness Survey the Government of India requested LAICO to carry out a blindness survey in Palghat district in Kerala. Aravind-Coimbatore under guidance of LAICO will carry this out and the survey protocol will be identical to the one used in Tirunelveli.

Diabetic Retinopathy Management: Lions Pilot Project

Collaborators : Lions Aravind Institute of Community Ophthalmology; Aravind Eye Hospitals-Madurai, Coimbatore and Theni

Duration : 2000-2005

This is a pilot project launched to combat diabetic blindness and provide necessary diabetic retinopathy services. The Knowledge, Attitude, Practice (KAP) study which is

done with the community, paramedics and general practitioners has been completed in Madurai and is being carried out in Coimbatore. The sample size of each group is 200. This KAP study will be repeated in the middle of the project period and again at the end of the project period to evaluate the effectiveness of the awareness programme provided to the target group.



Ms. S. Sheela Devi and Ms. Arylene Beech in the field

Vitamin A Supplementation in Newborns (VASIN) Study

- Investigators : Dr. Lakshmi Rahmathullah; Dr. James Tielsch
- Co-Investigators : Dr. Joanne Katz; Mr. R.D. Thulasiraj
- Collaborators : Johns Hopkins University, Baltimore, USA; Aravind Centre for Women, Children and Community Health, India
- Sample size : 9000 live borns
- Project Manager : Ms. S. Sheela Devi
- Duration : 1998-2001

The study seeks to determine whether Vitamin A supplementation in newborns within 48 hours after delivery will reduce infant mortality, respiratory tract infections, diarrhoeal diseases and improve growth in newborns. The study is being conducted at Kariapatty and Natham blocks in South Tamil Nadu. So far 14,055 pregnant women were enrolled and 11,411 newborns were given the dosage. Of the infants who received the dosage 8,637 completed their 6 months follow-up and were discharged from the study.

Role of Antioxidants in Cataract Prevention

- Investigators : Dr. David Gritz; Dr. M. Srinivasan
- Collaborators : Francis. I Proctor Foundation, USA; Aravind Eye Hospital, Madurai
- Sample size : 798 subjects
- Project Manager : Ms. R. Brinda Priyadarshini
- Duration : 1998-2001

creating community awareness among the subjects of the Antioxidant study

The study, a double masked, placebo-control randomised community based clinical trial seeks to determine the potential of oral Antioxidant supplementation in retarding the progression of cataract in South India and to determine epidemiological factors which influence the progression of cataracts in South India in the control sample.



Every year between January and February an annual evaluation of subjects is conducted in the field to assess the impact of antioxidants on the growth of cataracts. For the past 2 years, the team was able to achieve a 98% coverage. Further, to motivate and retain the subjects for continued participation, community meetings were conducted in all the study areas. The 3rd year follow-up is scheduled to be conducted from January 19-30, 2001.

Development and Testing of Indian Visual Function Questionnaire (IND-VFQ)

Co-Investigator : Mr. R. D. Thulasiraj
Project Coordinators: Ms. Preethi Pradhan; Mr. V. Vijayakumar
Funded by : Special budget released by the US Embassy
Collaborators : Multi-centric study with R.P. Centre for Ophthalmic Sciences, New Delhi (Central Coordinating Centre); Sarojini Devi Eye Hospital, Hyderabad; Aravind Eye Hospital, Theni

The multi-centric study to develop and test an Indian Visual Function Questionnaire similar to the one developed at the National Eye Institute, Bethesda called NEI-VFQ almost neared completion of Phase 1 of the study. During the year 2000, data collection through focus group discussions was completed with patients from different disease groups. The data was then consolidated across the three collaborating centres. A software developed at LAICO was used by all the three centres for data entry, multi-centric data analysis and also for item reduction which greatly helped expedite the process. From over 6000 problem statements that were generated, it was reduced to a list of just over 200 problem statements from which a draft questionnaire was prepared. It is currently in the process of being tested with the patients. An advisory board meeting for the study was held at the National Eye Institute in mid-November. With the finalisation of the questionnaire, Phase 1 of the study will end. During Phase 2 the validity and reliability of the questionnaire will be tested. In January 2000 as well as in September 2000 a review meeting was held at Dr. R.P. Centre for Ophthalmic Sciences, New Delhi with all the centres and the external consultants for the study participating.

The IND-VFQ review meeting was hosted by Aravind Eye Hospital, Madurai from April 18-20. Dr. Sanjeev Gupta and Mr. Akhilesh Kumar from Dr. R. P. Centre for Ophthalmic Sciences, New Delhi; Dr. Kulashekaran, Dr. K. Viswanath, Mrs. Sunitha and Mr. D. Kiran from Sarojini Devi Eye Hospital, Hyderabad attended the meeting.

focus group discussion of male low vision patients being held at Cumbum as part of the IND-VFQ study



Research in Ophthalmogenetics Ophthalmic Research Laboratory

Facilities are now available to carry out genetic, immunological and biochemical studies of ophthalmic diseases.

Dr. S.R. Rathinam has registered for Ph.D. with Dr. P. Namperumalsamy on “Studies on the clinical presentation, diagnosis, long-term complications and management of infectious uveitis with reference to leptospirosis”.

Molecular Genetics of Hereditary Glaucoma

Investigators : Dr. S. R. Krishnadas;
Dr. P. Sundaresan
Collaborators : University of Iowa,
USA; Aravind Eye
Hospital, Madurai

The project aims to identify the candidate genes for congenital glaucoma in Indian population. Further, the patients with juvenile open angle glaucoma and their family members are screened for mutations using known primers and this will ultimately contribute to developing methods for early diagnosis, genetic counselling and treatment.



Dr. G. Venkataswamy,
Dr. VR. Muthu-
kkruppan and
Dr. S.R. Rathinam in
the ophthalmic
research laboratory

Evaluation of Polymerase Chain Reaction (PCR) and other Parameters for Detection of Intraocular Tuberculosis in South Indian Patients

Investigators : Dr. S. R. Rathinam; Dr. P. Namperumalsamy; Ms. C. Gowri Priya
Collaborators : Indian Council of Medical Research (ICMR); Aravind Eye Hospital,
Madurai
Duration : 1997-2000

Tuberculous uveitis is a potentially blinding disease for which there is currently no satisfactory means of diagnosis because of its varying presentation and non-availability of intraocular fluids for laboratory analysis. This study was done to analyse various clinical parameters as well as laboratory techniques including Polymerase Chain Reaction (PCR). Ocular fluid from 40 clinically diagnosed tuberculous uveitis cases and 60 cataract cases (Controls) were tested for the presence of Mycobacterium tuberculosis by staining, culture and PCR, and for presence of antibodies by ELISA. The low positivity of these laboratory tests led to the conclusion that supportive evidence from systemic examination and therapeutic response aid in clinical diagnosis. Confirmation of tubercular etiology of such uveitis patients using these tests like PCR needs additional work.

Value of Culture and Serology in Ophthalmic Complications of Leptospirosis

Investigators : Dr. S. R. Rathinam, Dr. P. Namperumalsamy, Ms. P. Umadevi
Collaborators : Indian Council of Medical Research (ICMR); Aravind Eye Hospital,
Madurai
Duration : 1999-2001

Leptospirosis is one of the important zoonotic bacterial diseases, prevalent in most parts of the world. Systemic leptospirosis presents as a febrile disease in human beings. Uveitis is a well-known late complication of this entity. A large case series, indicating the leptospiral aetiology of a certain form of uveitis has been reported earlier. Therefore, etiopathogenesis of leptospiral uveitis has been studied in detail. Attempt is also made to develop diagnostic test for uveitis, associated with leptospirosis. This study involves the use of microagglutination test (MAT), ELISA, Western blot etc.

Paediatric Parasitic Eye Diseases

Investigators : Dr. S.R. Rathinam; Dr. P. Vijayalakshmi; Dr. Usha Kim

Co-Investigator : Dr. N.A. Rao, Dohney Eye Institute, Los Angeles, USA

This prospective study is aimed to analyse the parasitic ocular inflammatory disorders in children from east coast area of Tamil Nadu. Histopathological studies have indicated evidences for trematode etiology. Clustering of cases in certain areas and sporadic cases from all over Tamil Nadu indicate an absolute need for an extensive epidemiological work. Further studies are required to understand the risk factors and control measures to prevent temporary or permanent loss of vision in paediatric patients.

Childhood Cataract Outcome Study

Principal Investigator : Dr. P. Vijayalakshmi

Co-Investigator : Dr. Michael Eckstein, International Centre for Eye Health, London

Project Co-ordinator : Ms. B. Poornima

Duration : Follow up study for 10 years

This is a randomised clinical trial of lensectomy versus lens aspiration and primary capsulotomy for children with bilateral cataract in South India. Currently the follow-up of the study patients is going on and some of them have come for 7 years follow-up. The data has been entered for analysis.

Congenital Rubella Syndrome (CRS)

Principal Investigator : Dr. P. Vijayalakshmi

Co-Investigator : Dr. Clare Gilbert, International Centre for Eye Health (ICEH), London

Project Co-ordinator : Ms. B. Poornima

Funded by : NERC, a charity based in Bristol

The objective of the study is to identify and culture the rubella virus from already proven cases of Congenital Rubella Syndrome. Forty seven children who were already proved to be rubella positive were identified and brought to the hospital for further evaluation which include assessment of hearing ability, status of cardiac system, visual performance along with detailed ocular examination for the possibility of complications etc. The investigations include throat swab, blood, saliva and urine samples for further identification of the virus, which will be carried



Dr. Clare Gilbert
with
Dr. P. Vijayalakshmi

out in London by Dr. David Brown, Director, Enteric and Respiratory Virus Laboratory, London.

Molecular Genetic Analysis of Congenital Cataracts in Man and Mouse

Principal Investigator : Dr. P. Vijayalakshmi

Co-Investigator : Dr. P. M. Gopinath, Basic Medical Science, Taramani, Chennai

The main aim of this study is to understand the molecular and genetic basis of cataract.

For this three families have been identified and their DNA samples are being studied.

Further, a patient with lamellar cataract was identified for studying the molecular biology of gamma crystalline.

Randomised Double – Masked, Parallel Comparison of Safety, Efficacy and Tolerability of Alphagan Vs Trusopt as Adjunctive to Ophthalmic Beta-blocker Treatment in Paediatric Glaucoma

Principal Investigators : Dr. R. Ramakrishnan; Dr. S.R. Krishnadas

Sponsored by : Allergan Inc., USA

The objective of the study is to evaluate safety, efficacy and tolerability of Alphagan (Brimonidine tartrate) compared to Trusopt (Dorzolamide) as adjunctive to ophthalmic beta-blocker in children (2–7 years of age) with glaucoma. It involves measurement of intraocular pressure, alertness evaluation and vital parameters (BP, heart rate and temperature). So far, eleven children with glaucoma have been randomized in the study and are being followed up.

The following new projects have been recently initiated:

Studies on the Genetics of Inherited Aniridia in Indian Population

Investigators : Dr. P. Sundaresan, Dr. S.R. Krishnadas, Dr. P. Vijayalakshmi

A Pilot Study to Establish Leptospiral Aetiology of Uveitis

Investigators : Dr. S.R. Rathinam, Dr. VR. Muthukkaruppan

Studies on the Proangiogenic Cytokines in Eales' Disease

Investigators : Dr. VR. Muthukkaruppan, Dr. D. Shukla, Dr. P. Namperumalsamy

Aurolab

Aurolab, the manufacturing division of Aravind Eye Hospital, was started with the mission of supplying high quality ophthalmic products at prices affordable to the common man in the developing countries.

Since its inception in 1992 as a non-profit charitable trust, Aurolab has set up manufacturing facilities to produce intraocular lenses (IOLs), suture needles, pharmaceuticals and spectacle lenses. The international organisations that actively participated in developing the various activities at Aurolab include Seva Foundation, USA; Sight Savers International, UK; Combat Blindness Foundation, USA; Seva Service Society, Canada; CBM International, Germany; Canadian International Development Agency (CIDA), Canada; Al-Noor Foundation, Saudi Arabia. Aurolab's products are supplied primarily to non-profit eye care programmes at affordable prices. During its ninth year of operation, Aurolab has made significant progress in the year 2000.

Aurolab received the prestigious CE mark certification from the Danish Certifying Agency (DGM), for IOLs and suture needles during the previous year. This certification is normally valid for one year and extension for the subsequent year is based on successful completion of a rigorous yearly surveillance audit. DGM performed the first surveillance audit and extended CE mark certification for another year based on the ability of Aurolab to continuously meet the requirements of international standards. Aurolab also maintains the ISO 9002 certification from Underwriters Laboratory (UL), USA based on continuous assessments at every six month intervals.

Aurolab uses latest information and computer technologies as tools to continuously improve productivity and operational efficiency. The existing manufacturing software packages based on Foxpro were upgraded to SQL server based RDBMS software for better performance and reliability. This enhanced capability resulted in better inventory management, deliveries and customer service.

Ms. Wilma Wan
Berkel and
Mr. Thanawala of
Sight Savers
International with
Dr. P. Bala-
krishnan,
Mr. R.V. Durai-
swamy and
Mr. H. Narayanan

Intraocular lens division

Aurolab IOL division continued its main mission of supplying high quality lenses for eye care programmes. Since its inception in 1992, Aurolab has supplied more than 2 million

lenses to non-profit users in India and 85 other countries worldwide. New styles of single piece lenses were introduced to meet the growing demand. Four new models of small incision lenses were designed, produced and introduced in the market for phaco and manual non-phaco small incision cataract surgery.

Several productivity improvement programmes such as Quality Circles (QC), Statistical Process Control (SPC) and Waste Elimination were successfully implemented, resulting in higher yield. Efforts were also initiated to produce hydrophilic





quality control and packaging of intraocular lenses in a clean room

foldable lenses and capsular tension rings using the existing single piece machinery to meet the increasing customer demand. Aurolab also plans to produce silicone and hydrophobic acrylic foldable lenses.

Suture needle division

Commenced in 1998 to further bring down the cost of cataract surgery, the suture needle division grew considerably in supplying high quality suture needles primarily to non-profit eye care programmes. The production and sales registered an impressive 90% growth over the previous year. Based on the demand from the market, new models with 10-0 and 9-0 Nylon and 8-0 Virgin Silk sutures attached to 200 micron wire size needles were added to the ophthalmic product range.

Additional equipment was added to produce other needle point shapes such as taper point, reverse cutting and conventional cutting for suture sizes of 10-0 to 6-0. Equipment for attaching other common suture materials such as polypropylene,

polyester and synthetic absorbable sutures was also added. Since the demand for ophthalmic suture needles are expected to decrease due to the introduction of sutureless cataract surgical techniques, Aurolab has initiated the effort to use the available equipment for the production of micro suture needles for other medical specialities also. Trial production of this new range of suture needles was initiated and the test results of these needles are very encouraging. This new range of products will be introduced after further refinement of the production processes and careful evaluation of the safety and efficacy of the products.

Aurolab actively worked with many international marketing groups to register its products in the countries where such registration is mandatory. Registration in Russia with the Ministry of Health of Russian Federation was completed. Aurolab is working to get the WHO GMP certification which is mandatory for marketing in some countries.



inspection of suture needles using precision measuring instrument



filling of ophthalmic drugs using a peristaltic pump

As a part of the diversification effort, the suture needle division is planning to add stainless steel wire based ophthalmic microsurgical blades to the product range. These blades are widely used in phaco and manual small incision cataract surgery.

Pharmaceutical division

The pharmaceutical division continued with the manufacturing and supply of more than 16 ophthalmic drops including steroids, anti-inflammatory, anti-bacterial and cyclic drugs for in-house use at Aravind Eye Hospitals. The sale of viscoelastic (HPMC) and silicone oil products has increased

considerably due to the high quality and better acceptance among the customers. Packaging of HPMC in pre-filled syringes was developed and the product has been released to the market after extensive tests.

Econozole, an anti-fungal drops, was developed and supplied to Aravind Eye Hospitals since this drug was not readily available to treat the large number of fungal ulcers. A clinical comparative study on the safety and efficacy of this drug compared to another anti-fungal drug, Natamycin, is in progress. Based on the request from the hospital optical stores, a new optical lens cleaning solution with appropriate spray delivery packing system was also developed. These new products are well accepted by the users due to their high quality and affordable prices.

Aurolab perfected the processes for manufacturing high-quality fluorescein sodium strips, commonly used in diagnostic tests, and supplied them to Aravind Eye Hospitals regularly. This product will be supplied to other customers once the capability for individual packing of these strips is ready. Efforts to get WHO GMP certification for all the pharmaceutical products and CE mark certification for HPMC viscoelastic were initiated. The preliminary audit for these certifications has been completed.

The future plans of pharmaceutical division include production of Natamycin, an antifungal suspension to treat fungal keratitis, Trypan Blue dye solution for capsule staining during cataract surgery, sodium hyaluronate based viscoelastic solution and anti-viral eye drops. The division also plans to use plastic bottles instead of glass bottles for the customer's convenience and also to conform to international practices.

Spectacle lens division

The unbreakable and lightweight plastic spectacle lenses have almost replaced glass lenses in developed countries. However, glass lenses are still very widely used in India and many other countries around the world due to high prices of plastic lenses. Introduction of appropriate technologies for in-house processing of plastic spectacle lenses

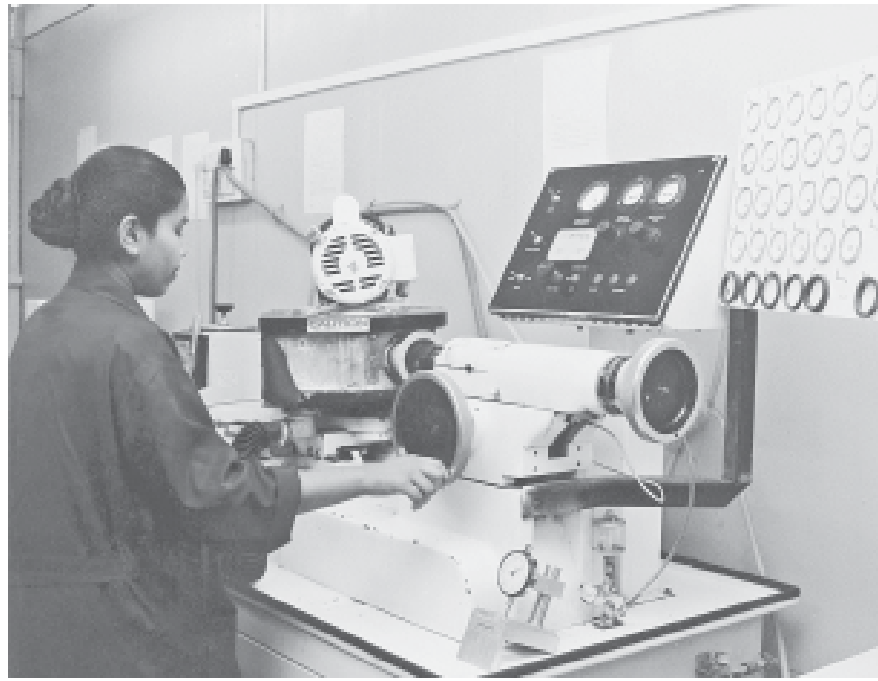


chemical analysis of pharmaceuticals using spectrophotometer

was identified as the major need for making plastic lenses available and affordable. The spectacle lens division was established in 1999 to produce prescription plastic spectacle lenses for the optical shops at Aravind Eye Hospitals. The availability of plastic lens surfacing and computerised edging capability has made it possible for the optical shops to offer these quality products at appropriate prices. This has resulted in increased acceptance of plastic lenses and higher customer satisfaction. The volume of orders processed by the division has increased substantially over the previous year.

In order to provide better service to the optical shops in Aravind Eye Hospitals, at different locations, additional lens edging facilities were set up close to the optical shops to facilitate quick delivery. The availability of this facility has made it possible to prepare readymade glasses for prompt delivery in eye camps and also to provide training programmes for opticians.

The spectacle lens division has plans to acquire additional processing capabilities such as scratch resistance coating, tinting and antireflection coatings to provide better value for the customers. Preparations are also underway to establish in-house production facilities for glass lens processing for improving the quality and to provide better customer service.



curve generator for plastic prescription lens surfacing

Partners in Service

Aravind is grateful to all the organisations which have joined hands with the Aravind Eye Care System in its war against blindness, through various means. They continue to be a rich source of support and inspiration for the organisation's sustainable development and growth.

For service delivery, human resource and other developmental activities

- Canadian International Development Agency (CIDA), Canada
- CBM International, Benshiem, Germany
- Combat Blindness Foundation, USA
- International Eye Foundation, Bethesda, USA
- International Federation of Eye Banks, Baltimore, USA
- Lions International
- Orbis International
- Rotary International
- Seva Foundation, Berkeley, USA
- Seva Service Society, Vancouver, Canada
- Sight Savers International, Haywards Heath, UK
- Voluntary Service Overseas (VSO), UK
- Zurich Financial Services, Community Trust, UK

For research

- Alcon Pharmaceuticals, Fort Worth, Texas, USA
- Allergan Inc., Irvine, USA
- Department of Ophthalmology, University of Iowa, USA
- Humphrey Instruments, Berkeley, USA
- Indian Council of Medical Research (ICMR), New Delhi, India
- International Centre for Eye Health, London
- Johns Hopkins University, School of Hygiene and Public Health, Baltimore, USA
- Johnson & Johnson, Florida, USA
- London School of Hygiene and Tropical Medicine, UK
- National Eye Institute, Bethesda, USA
- Netherlands Ophthalmological Research Institute, Amsterdam, Netherlands
- Proctor Foundation, San Francisco, USA
- Royal Tropical Institute, Amsterdam, Netherlands

Volunteers and Visitors

Names of volunteers and visitors not mentioned elsewhere in the report are listed here.

- Dr. Winifred Gallagher, Journalist, USA visited Aravind to interview Dr. G. Venkataswamy to write a book about him.
- Dr. Edwin Rajiah, Prof. of Ophthalmology, Stanley Medical College, Chennai, representative of Dr. M.G.R. University was here as a member of the PG selection committee.
- Mr. S. Basava Raj and Ms. Gitanjali Kumar, Management Service Group, New Delhi came to assess the potential of LAICO/Aravind to become a National Eye Care Resource Centre (NECRC).
- Ms. Harriet Rubin, USA a journalist was here to write about Aravind Eye Hospital and Dr. G. Venkataswamy for the magazine “Fast Company”. It has been published as an article titled ‘The perfect vision of Dr. V’.
- Ms. Julie Johnston, Seva Volunteer, USA was here to do the final edit of the Quality Cataract Surgery Series.
- Dr. Kamle, MD, Hyderabad, gave a lecture on Quality Standards, in which he briefed about the entry of foreign health insurance companies into India and the various possibilities of utilising them.
- Prof. Nirmalya Kumar, International Institute for Management Development (IMD), Lausanne, and his research associate Mr. Brain Rogers were here to write an update to the Harvard Case Study.
- Mr. Nirbhay Jain, Senior President of Century Rayon has set-up SKS Chakshu Foundation in memory of his mother. He came to consult with Aravind Eye Care System for assistance to establish an eye hospital under the auspices of the Trust in the Vashi (Greater Bombay) area.
- Ms. Deschen Tsering, Programme Manager, Seva Foundation, came to review the Cambodia Programme and the Bahraich North India Programme.
- Dr. Amod Gupta, Chandigarh, was here to inspect the Retina and Vitreous fellowship programme for recognition under the National Board of Examinations.
- Dr. R. P. Sinha, State Programme Officer, Bihar came to the Aravind Centre for Women and Children and Community Health to discuss the control of Vitamin A deficiency in Bihar.
- Dr. Rajagopal, M. S. Swaminathan Research Foundation gave a guest lecture on “Freedom for Hunger”. He also addressed the members of the Foundation Revitalization of Local Health Tradition (FRLHT) who were undergoing a course at LAICO on Basic Statistics and Mr. Madan Kumar, Development of Humane Action (DHAN) Foundation addressed them on “Time Management”.
- Dr. V. Mohan, M.V. Diabetes & Specialities Centre (P) Ltd and Dr. S. Shantha, Stanley Medical College from Chennai were here to inspect the Genetics and Immunology lab for PhD. recognition under the MGR Medical University.
- Dr. Ravishankar, Asst. Managing Director, Sankara Nethralaya was here to inspect the paediatric clinic for recognising it for the paediatric ophthalmology and strabismus fellowship training under the National Board of Examinations
- Mr. Sunil Chojar, USA came to Aurolab to discuss regarding the hearing aids project
- Dr. J. P. David, representative of Operations Eyesight Universal (OEU) in India and Mr. Don O’Dwyer, Executive Director, OEU, Canada



Dr. Jean Behar with Mr. R.D. Thulasiraj, Ln. Nagarajan and Ln. NAK Gopalakrishnaraja



Prof. and Mrs. Munson inaugurating the students health club

Mr. R.D. Thulasiraj and Dr. G. Natchiar with Dr. Christine Melton and Dr. Richard at the Rockefeller University, USA



- Dr. Yadavinder Dang, Ophthalmologist, National Eye Institute, USA
- Mr. Arun Muttreja, Voluntary Services Overseas, New Delhi
- Mr. Mike Lynskey, Chief Executive and Mr. Chip Morgan, General Manager, Fred Hollows Foundation, Australia
- Dr. Christine Melton, St. Vincents Hospital, New York, USA
- Ms. Joanie Mitchell, Artist, California made sketches of Aravind. These sketches were later compiled and published as a book titled 'Journey to Aravind'.
- Mr. David Green, and Mr. Joe Gross, USA came to discuss about the Sutra Tec - Aurolab collaboration. Around the same time Mr. David Eilers, Mr. Bob Bietrafesa of Sulzle Co., USA were here for discussion relating to sutures.
- Dr. Demissie Tadess, Ophthalmologist, Ethiopia
- Ms. Holly Turner, Seva Volunteer
- Ms. Issebel Austin, Chief of UNICEF, Chennai
- Dr. Jean Behar, Lions International President
- Dr. Alvan Balent, Dr. Linda Balent and family, USA
- Ms. Jasmine Hamlett, Journalist, Odyssey, USA
- Dr. Richard Litwin and his wife Judith Litwin, Seva Board, USA
- Dr. Paul Suslov, International Eye Missions, USA

For staff and organisational development

- Dr. Daniel Schainholz, USA was here to strengthen the low vision service at the vision rehabilitation centre.
- Dr. Fred Munson, Professor, Emeritus; his wife Ms. Mary Munson, and their daughter Ms. Meg Leuker, USA were at Aravind for over two weeks. While here Prof. Fred Munson focused on organisational development and specifically on management retreat, he also inaugurated the health club at the student's hostel. Ms. Mary Munson focused on improving the Janaki Amma Day Care Centre.
- Dr. R.N. Banerjee and Mrs. Banerjee, UK visited Aurolab and gave inputs on manufacturing additional drugs in the pharmaceutical division.
- Mr. Simon Leek, Zurich Financial Services, UK gave training on managing software development projects.
- Ms. boona cheema, Co-Chair, Seva Foundation, Ms. Terry Mandel, Seva Consultant, Mr. Neil Smith, Seva Service Society, USA were here to assist in the reorganisation of Aravind.
- Mr. Jerry Jones, Treasurer of Seva Foundation and his friends, Mr. Tore Streev and Ms. Karan, Portland, Oregon,

USA, were here to discuss about support to Aravind.

- Ms. Martha Moore, Seva Volunteer, USA was here to develop a budgeting process for Aravind Eye Hospitals. She visited Aravind once again in November to monitor the development of the budgeting system.
- Ms. Bonnie Carl, Principal Consultant, The ABC consulting group, USA, was here to conduct seminar for Quality Council Members on Introduction to Quality Management.
- Dr. Jonathan Seidenberg, USA was here to give surgical demonstration in foldable lens and work with Aravind's surgeons. He also observed LASIK surgery procedures, and gave lectures to the PG's and Fellows.
- Prof. Sohan Singh Hayreh, University of Iowa, USA accompanied by his wife gave guest lectures to the postgraduate students on the following topics.
 - Anterior Ischemic Optic Neuropathy
 - Nocturnal arterial hypotension and its role in ophthalmology
 - Central retinal vein occlusion
- Mr. Rolf Spingler and Ms. Stephanie visited Aurolab to oversee the installation of additional equipment in the Suture Needle Division.
- Ms. Alison King, Zurich Financial Services, UK was here to study and develop the communication process in Aravind.
- Mr. Adam Zayan, Mr. Jeff, Mr. Eva and Dr. Raj Kumar from Orbis, USA, were here to discuss how Aravind's facilities and resources could be used to supplement the training activities of Orbis in India and other countries. They also discussed the use of telemedicine technologies in delivering eye care services to developing countries. A pilot programme at Aravind will be initiated with technical assistance from Orbis.



Prof. Srinivasan and Prof. Sohan Singh Hayreh

- Dr. Mark Duffy, Oculoplastic and Reconstructive Surgery, University of Illinois, USA, was here to observe the orbit clinic and work with Dr. Usha Kim at the clinic.
- Dr. Suzanne Gilbert, Seva Foundation, USA was here to discuss the Seva-Aravind Sight work and development of LAICO faculty
- Dr. John Pratt Johnson, Prof Emeritus, Department of Ophthalmology, University of British Columbia and Department of Ophthalmology, Children's Hospital, Vancouver, Canada was here to educate the doctors on strabismus surgery and related topics.
- Dr. Steve Miller, Vice President, Kaiser Permanente was here to conduct a series of workshops on "Participative Problem Solving"
- Dr. Yadin David and Mr. Jed Kenna, Texas Children Hospital, Houston USA were here as Telemedicine consultants. Mr. A.K. Sangal, Group Director, COSSAG (ISRO), Ahmedabad also joined them.
- Mr. Nipun Mehta, Seva board member was here to have a better understanding of the Aravind Institutions. While here he discussed about further development of Aravind's Website.



Ms. Mary Lydia,
Ms. Pavithra and
Ms. Preethi with
Mr. Nipun Mehta

- Dr. James M. Tielsch, Johns Hopkins University, Baltimore, USA was here to evaluate the progress of the Vitamin A Supplementation in Newborns (VASIN) study. He addressed some of the LAICO staff and postgraduate students on “Principles of developing and designing a research programme in public health”.
- Ms. Lakshmi Deshpande and Ms. Mrunalini Kulkarni “Quintiles Spectral” Private Limited, visited Aravind Centre for Women Children and Community Health to discuss regarding the Vaccine Trial Project.
- Ms. Arlyne Beeche, Johns Hopkins University, USA is working on birth weight analysis, a sub-study of the VASIN Project.
- Dr. Clare Gilbert, UK was here to initiate the congenital rubella study.
- Mr. Mike Eckstein, UK was here to do further work in the childhood cataract study.
- Ms. Silkie Wianecke, USA came to initiate the Allergan Paediatric Study
- Dr. Barry Jones, Paediatrician and Ms. Dorothee, Nurse Neurology from UK, were here to work on the Congenital Rubella Study. While here Dr. Barry examined the Rubella study paediatric patients.
- Ms. Gill Saunders, Zurich Financial Services, UK was here for the assignment on work load analysis.
- Ms. Maxine Harrington, Volunteer, Voluntary Services Overseas, England was here for about 2 years as the Human Resource Development (HRD) advisor to develop the human resources process with Aravind Institutions.
- Dr. T. Otis Paul, Paediatric Ophthalmologist, Dr. Roy Jacobstein, MD and Ms. Lori Carruthers, Masters in Public Health from International Eye Foundation, USA were here to evaluate the ‘Seeing 2000’ project.
- Dr. Robert Peterson and his wife from USA were here for over a month. While here Dr. Peterson served as the course faculty for the CME programme. He also made a donation to Aravind through Seva to support a Health Education Project aimed at improving childbirth weight and nutrition.

Resource persons for research

- Dr. Tamara Kimburegh and Mr. Jeannine Shill, Allergan, USA were here to discuss the study on safety and efficacy of the new anti-glaucoma drug in paediatric glaucomas.
- The following doctors were here for the Annual Cataract Evaluation of Antioxidant Study:
- Dr. David Gritz, Dr. Jack Witcher and Dr. Tom Lietman, Francis I Proctor Foundation, USA
 - Dr. Scott Smith, King Khaled Eye Hospital, Riyadh
 - Dr. John Wilkins, Devers Eye Institute, Portland, Oregon, USA

Examiners

MRCOph

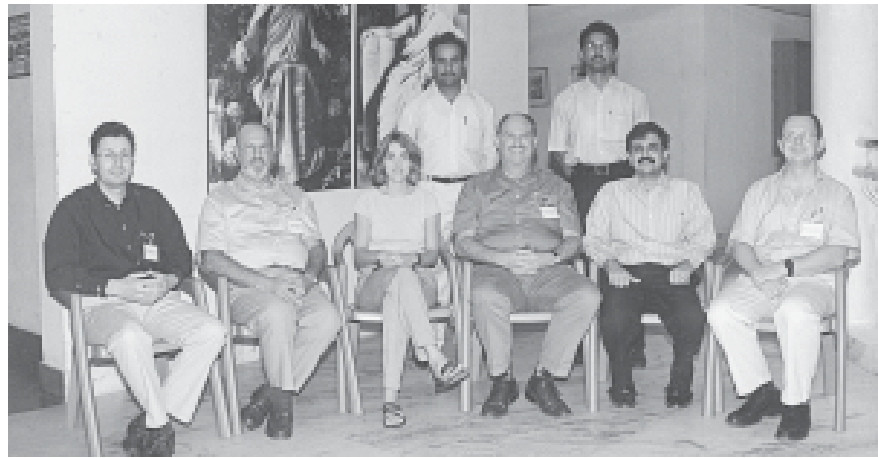
- Mr. Simon Keightly FRCOph
- Mr. Peter Black, FRCOph
- Mr. John Bradbury FRCOph
- Mr. Michael Nelson, FRCOph
- Ms. Claire Smith, Examination Officer, London, U.K.

MS and DO

- Dr. Selvasundari, Chennai
- Dr. D. Raviprakash, Bangalore
- Mrs. & Dr. M. Muthayya, Chennai

Medical students

- Ms. Jaya Chidambaram, UK, spent time in observing clinical areas and also helped in proof reading some of the chapters in the Small Incision Cataract Surgery manual.
- Dr. Sharad Kohli, USA, was here to work on the Paediatric project
- Ms. Lindsey Loveland, University of Wisconsin, Madison, USA did her medical elective in the Retina services
- Ms. Arundhati Dev Borman and Ms. Krina Vinod Amin, from King's College, London, UK were here to have an overview of ophthalmology in the South India.
- Dr. James Heltzer and Dr. Surekha Collur, Ophthalmic Consultants of Boston, USA
- Dr. Raghu Mudumbai, University of Washington, USA
- Mr. Anil Simhadri, UK, came here to observe the uvea clinic



Dr. N.V. Prajna,
Dr. Manoj Kumar
and
Mr. Manimaran with
MRCOph. examiners
Mr. Simon Keightly
Mr. Peter Black,
Mr. John Bradbury
Mr. Michael Nelson,
and
Ms. Claire Smith

Awards and Accolades

During the year many national and international organisations honoured Aravind staff through various awards - a source of pride for Aravind and a testament to the quality and commitment of the individuals who work here.

Dr. G. Venkataswamy

Life Time Achievement Award

in admiration of his ceaseless endeavours that have contributed to the advancement of the science of ophthalmology at the 58th annual meeting of the All India Ophthalmological Society held at Chennai on January 7.

20th Century Best Service Award

in appreciation of his untiring service, by Indian Association for the Blind on February 10.

Distinguished Physician Award

from the American Association of Physicians of Indian Origin for his contribution to Humanity on July 1.

Felicitation

by the Public Relations Society of India, Coimbatore Chapter and the Coimbatore Management Association on October 28, as a mark of honour for his untiring services in blindness prevention.

Prof. K.A. Krishnamurthy Annual Oration Award

in recognition of his outstanding work in the field of community ophthalmology, prevention of xerophthalmia using local resources and pioneering work in fighting against cataract blindness, from Indian Academy of Pediatrics, Mpark Branch, Madurai on December 24.

Felicitation to Dr. G. Venkataswamy by the Public Relations Society India, Coimbatore Chapter and the Coimbatore Management Association



Telugu Thalli Award

for his excellent and dedicated contribution in the field of health and unique glorious performance and services to human kind at the Biennial conference, Vishakapatnam by the World Telugu Federation on December 29.



Dr. P. Namperumalsamy, Dr. M. Srinivasan and Dr. S.R. Rathinam recognised as international research associates by the Proctor Foundation

Dr. P. Namperumalsamy

Most Outstanding Retinal Surgeon of the Millennium Award

from the Executive Committee of the “Eye Advance 2000” on September 22 by the Chief Minister of Maharashtra.

Fellow of the National Academy of Medical Sciences

in recognition of his significant contribution for the advancement of Medical Sciences by National Academy of Medical Sciences, New Delhi on March 25.

Dr. P. Namperumalsamy Dr. M. Srinivasan and Dr. S. R. Rathinam

were recognised as _____ of Proctor Foundation. Certificates were handed to them on February 8 by Dr. Jack Whitcher.

Mr. G. Srinivasan

For the Sake of Honour Award

by the Rotary Club of Courtallam Central District 3210 R.I on October 18 at Tenkasi.

Mr. G. Srinivasan (third from left) at the award ceremony at Courtallam

Dr. G. Natchiar

Nethra Seva Rathna Award

in recognition of Yeoman services in blindness prevention by Lions Club of Pollachi, at the Lions Club International Dist. 324 B1 Region ‘C’ conference on February 27.





Dr. G. Natchiar
receiving the
Nethra Seva
Rathna Award



Dr. M. Srinivasan
receiving the
III Alexander
Memorial Oration
Award

Dr. M. Srinivasan

Dr. Sundareswaran Endowment Oration Award

was conferred by Indian Medical Association, Coimbatore on March 26.

III Alexander Memorial Oration Award

at the 27th Annual Conference of Kerala State Ophthalmic Society, Calicut on December 1.

Dr. Usha Kim

Dr. C.P. Gupta Best Paper Award

for the presentation “Scleral strips for frontalis surgery” at the 48th Annual TNOA conference at Madurai on August 12.

Dr. P. Mohan

Best Paper Award

for the presentation “Postoperative endothelial cell loss following secondary IOL implantation” at the Southern Regional Ophthalmological Conference, Bangalore on November 5.

Ms. Shenbagavalli

Best Service to the Public Award

to Ms. Shenbagavalli, Nursing Superintendent, Aravind Eye Hospital, Tirunelveli by the Lions Club of Palayamkottai on December 12.

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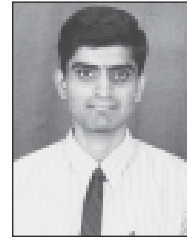
Residents: Class of 2000

Aravind Eye Hospitals
& Postgraduate Institute of
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Affiliated to
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National Board of Examination, New Delhi
The Royal College of Ophthalmologists, London, UK

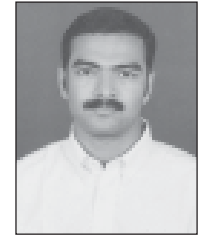
Dip.NB: Diplomate of the National Board



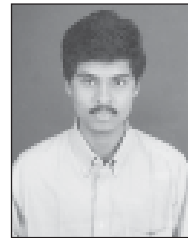
Dr. R. Sharmila



Dr. Hetal N. Shah



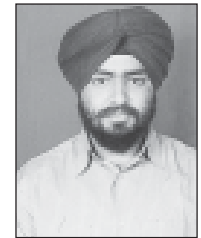
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Dr. G. Rajasekhar



Dr. Kothari Indrajit



Dr. Gurdeep Singh

MS in Ophthalmology

DO: Diploma in Ophthalmology



Dr. J. Arun Kumar



Dr. L. Anand



Dr. N. Maya



Dr. D.R. Anil

MRCOph.: Membership of the Royal College of Ophthalmology



Dr. S. Kavitha



Dr. H. Kasthuri Bai



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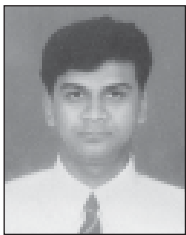
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World Health Organization
Collaborating Centre
For Prevention of Blindness

Aravind Eye Hospitals & Postgraduate Institute of Ophthalmology

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