

Community Outreach Programmes

Community awareness and involvement are vital to the success of any programme dealing with long-suffering patients.

Free Eye Camps in the year 2001, 2000 eye camps were carried out in



outreach eye camps.

Diabetic Retinopathy W Community Outreach Programmes

was organised in the project districts in which 1000 patients and 663 patients were found to be affected. 666 were diagnosed as Diabetic Retinopathy patients.

2001 ACTIVITIES REPORT



Prevention of total loss of vision and common eye diseases. Clinical demonstration of patients presenting with



1976-2001 Silver Jubilee Celebrating 25 years In service for sight





“A thought comes down from the ideal worlds
And moves us to new-model even here
Some image of their greatness and appeal
And wonder beyond the ken of mortal hope.
Amid the heavy sameness of the days
And contradicted by the human law,
A faith in things that are not and must be
Lives comrade of this world’s delight and pain,
The child of the secret soul’s forbidden desire
Born of its amour with eternity.
Our spirits break free from their environment;
The future brings its face of miracle near,
Its godhead looks at us with present eyes;
Acts deemed impossible grow natural;
We feel the hero’s immortality...”

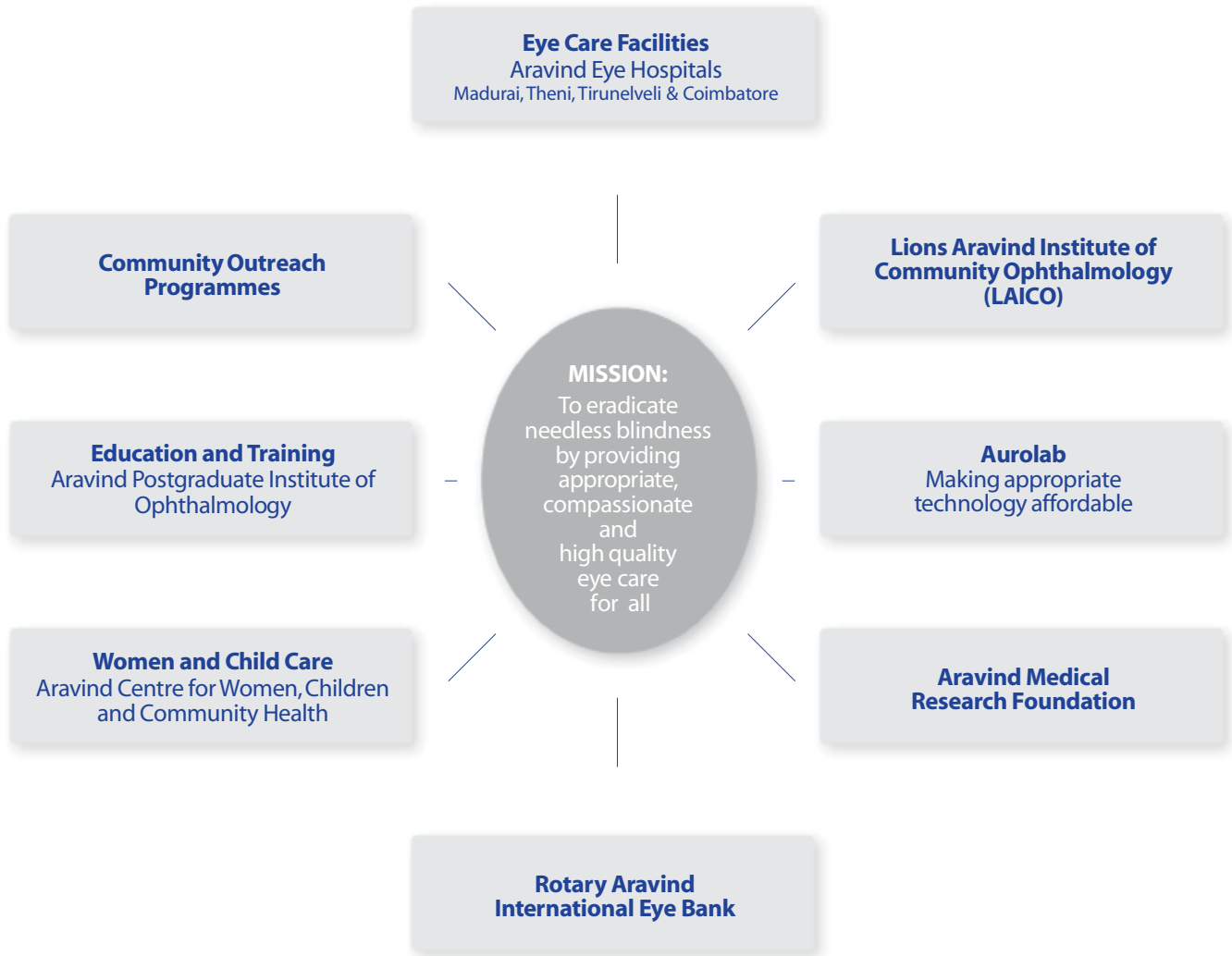
Sri Aurobindo—“Savitri”

Contents

2001: THE YEAR IN RETROSPECT	5
ARAVIND EYE CARE SYSTEM	10
STATISTICS 2001	12
COMMUNITY OUTREACH PROGRAMMES	14
EDUCATION AND TRAINING	
ARAVIND POSTGRADUATE INSTITUTE OF OPHTHALMOLOGY	17
CONTINUING MEDICAL EDUCATION PROGRAMMES	
AT ARAVIND & LAICO	18
IAPB MEETINGS	23
CONFERENCES ATTENDED ELSEWHERE	25
PUBLICATIONS	37
LIONS ARAVIND INSTITUTE OF COMMUNITY OPHTHALMOLOGY	38
ARAVIND CENTRE FOR WOMEN, CHILDREN AND COMMUNITY HEALTH	49
RESEARCH PROJECTS	51
AUROLAB	58
EYE BANK	61
PARTNERS IN SERVICE	63
VOLUNTEERS AND VISITORS	64
AWARDS AND ACCOLADES	68



ARAVIND EYE CARE SYSTEM



2001: The Year in Retrospect

The first year of the millennium was one of celebration and growth, as Aravind Eye Care System marked its Silver Jubilee year and continued to evolve in areas of service, infrastructure, academics and collaborative relationships.

Aravind maintained its commitment to service in 2001, handling more than 1.3 million outpatient visits, performing 190,000 surgeries and conducting about 1,500 screening eye camps.

In addressing its primary goal of providing quality eye care services, Aravind completed work on a number of projects to further improve its infrastructure and service delivery system. Several new facilities were inaugurated in 2001. At Madurai, Aravind constructed a hostel that now houses 600 nursing, housekeeping, catering and Aurolab staff. In addition, a new 600-bed free hospital was built to accommodate the high volume of patients brought in from large eye camps. These patients were previously housed in rented community halls. In Theni, Aravind opened a new block for free patients. This building offers an expanded outpatient department and has increased the capacity for free inpatients to almost 200. Also this year, a modern canteen was opened at Aravind, Tirunelveli that now serves both patients and hospital staff.

Several new construction projects were launched in 2001. On the 15th of August, Aravind celebrated the birth date of its namesake Sri Aurobindo with the inception of an ambitious new venture. On that day in Pondicherry, the foundation stone for the fifth Aravind hospital was set in place. In this same year at Tirunelveli, work commenced on the construction of new hostels for nurses and postgraduate doctors.

Aravind's goal to provide quality eye care services to a large volume of patients entails the acquisition of new equipment as well as the construction of new facilities. In 2001, Aravind hospitals in Madurai and Coimbatore received state-of-the-art vitrectomy units. Other new purchases included Transpupillary Thermo Therapy for treating Age Related Macular Degeneration and a second LASIK- Excimer laser for refractive surgery at Coimbatore.

On the academic front, Aravind continued to address the national and international demands for more professional education programmes. The number of training slots for the Diplomate of National Board was increased to three at Aravind-Tirunelveli. All other training activities, such as the Postgraduate Residency Programme, Management Fellowship and Short-term Skill Development Course were offered throughout the year. At the request of the Government of India, Aravind trained



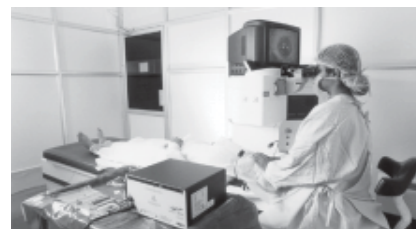
Nurses Hostel at Aravind-Madurai



Facility for camp patients at Aravind-Madurai



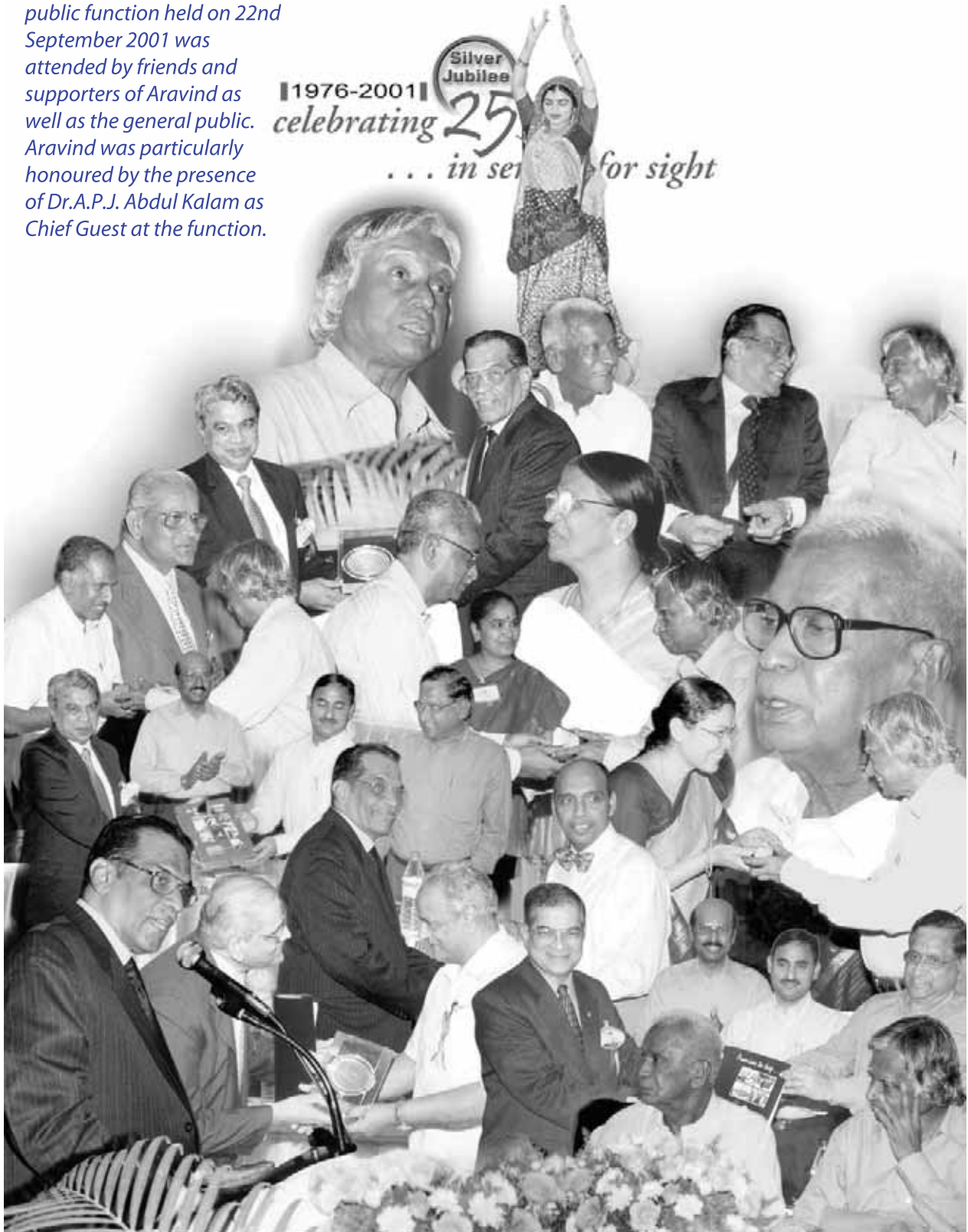
New canteen and bank facility at Aravind-Tirunelveli



Dr. Revathy performing LASIK surgery at Aravind-Coimbatore

Without doubt the highlight of the year was the Silver Jubilee celebration. This public function held on 22nd September 2001 was attended by friends and supporters of Aravind as well as the general public. Aravind was particularly honoured by the presence of Dr.A.P.J. Abdul Kalam as Chief Guest at the function.

1976-2001
Silver Jubilee
celebrating 25
... in service for sight



approximately 100 government employed ophthalmologists from Uttar Pradesh in IOL Microsurgery in 2001.

The Management Training and Capacity Building activities at LAICO attracted participation from many more hospitals. During the year delegates representing eye care programmes in China, Indonesia and the Philippines came to study the Aravind Eye Care System and take back lessons to improve eye care services in their respective countries.

Aravind's work was further recognised with the receipt of a special grant from the World Health Organization—South East Asia Region. This grant allows Aravind to work with leading government eye hospitals in Bangladesh and Indonesia to

improve their capacities and develop as models for the delivery of eye care services in their respective countries. Aravind was one of the first recipients of a grant from the International Agency for Prevention of Blindness to provide management training in eye care. These grants will be used to enhance the management skills and organisational competency of eye care programmes in the regions of Southeast Asia and Africa.

During the year Aravind received much recognition, at both institutional and individual levels. Dr. G. Venkataswamy received the prestigious B. C. Roy National Award, as well as the Rajalakshmi Award. The All India Ophthalmic Society conferred the E. T. Selvam Award on Dr. R. Ramakrishnan and the R.N. Mathur Award on Dr. S.R. Rathinam. On the institutional front, the World Health Organization re-designated Aravind as a collaboration centre for an additional four-year period in recognition of the significant contributions made to promote eye care service in the country and in the region. Similarly acknowledging the contribution that it regularly makes to national programmes through service delivery, training, evaluation and participating in the policy meetings, the Government of India designated Aravind as one of the National Eye Care Resource Centres.

To commemorate the Silver Jubilee Celebration two special publications were produced—*Promises to keep ...*, a description



Bhoomi Pooja for Aravind-Pondicherry—August 15



Construction of Aravind-Pondicherry

of what Aravind has accomplished and what remains to be done, and *Reminiscence*, a historical perspective of Aravind's growth and development, and the individuals who built it.

Throughout the year Aravind hosted several other activities, including clinical seminars for ophthalmologists and eye care exhibitions for the public. These eye care exhibitions were open to the public for five days at Madurai and later at Coimbatore.



Dr. L.V. Shanmuganathan and nurses in Magrabi Eye Hospital, Cairo, Egypt

Both exhibitions were well-attended and enthusiastically received by the community. Aravind-Tirunelveli will conduct a similar exhibition in the early part of the year 2002.

Aravind is now participating in an increasing number of collaborative efforts to promote eye care services both in India and in many other countries. In December 2001 the M. P. Birla Eye Hospital was inaugurated in Kolkatta. Aravind is closely managing this venture, right from the selection of nurses from West Bengal and their training, and the appointment of ophthalmologists and administrators, to providing clinical and overall developmental support.

A team headed by Dr. L.V. Shanmuganathan travelled to Egypt in June 2001 to train the ophthalmologists at Magrabi Eye Hospital, Cairo in manual small incision cataract surgical techniques and the organisation of high-volume, high-quality cataract services. In October 2001, Dr. Mohan went as a resource person to an IOL Microsurgery "training of trainers" workshop organised at Kaduna, Nigeria.

As Aravind reviewed its growth and development it found much cause to celebrate. Drawing strength from its many achievements in the field of quality low-cost eye care, it also recognised the great challenges that lie ahead. Celebrating twenty-five wonderful years in service for sight, Aravind looks to the future with renewed vigour as it continues its war against needless blindness.



Dr. S. Aravind with the team in Birla Eye Hospital, Kolkatta

Aravind Eye Care System



Aravind–Madurai



Aravind–Theni



Aravind–Tirunelveli

Aravind Eye Hospitals

Paying & Free Sections

Aravind–Madurai

Aravind–Theni

Aravind–Tirunelveli

Aravind–Coimbatore

Aravind–Pondicherry (under construction)

Specialty Clinics

Retina & Vitreous

Cataract & General Ophthalmology

Cornea

Paediatric Ophthalmology & Strabismus

Contact Lens

Glaucoma

Uvea

Orbit & Oculoplasty

Neuro-Ophthalmology

Support Facilities

Ocular Microbiology Laboratory

Ophthalmic Research Laboratory

Immunology

Biochemistry

Radiology Department

Instruments Maintenance Laboratory

Patient Counselling Services

Audio-Visual Department

Aravind Library & Information Centre

Aravind Communications Division

Vision Rehabilitation Centre

Community Outreach

Free Eye Camps

School Eye Health Screening

Village Volunteers Programme

Community Based Rehabilitation Programme

Refraction Camps

Diabetic Retinopathy detection &

Awareness Camp

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
Population-based Epidemiologic Surveys
Health Systems Research
Hospital and Community-
based Randomised Clinical Trials
Basic Laboratory Research—Genetics,
Microbiology, Biochemistry

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
Paramedical Courses

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 Division
Suture Needle Division
Pharmaceutical Division
Spectacle Lens Division



Aravind-Coimbatore



Lions Aravind Institute of
Community Ophthalmology and
Aurolab

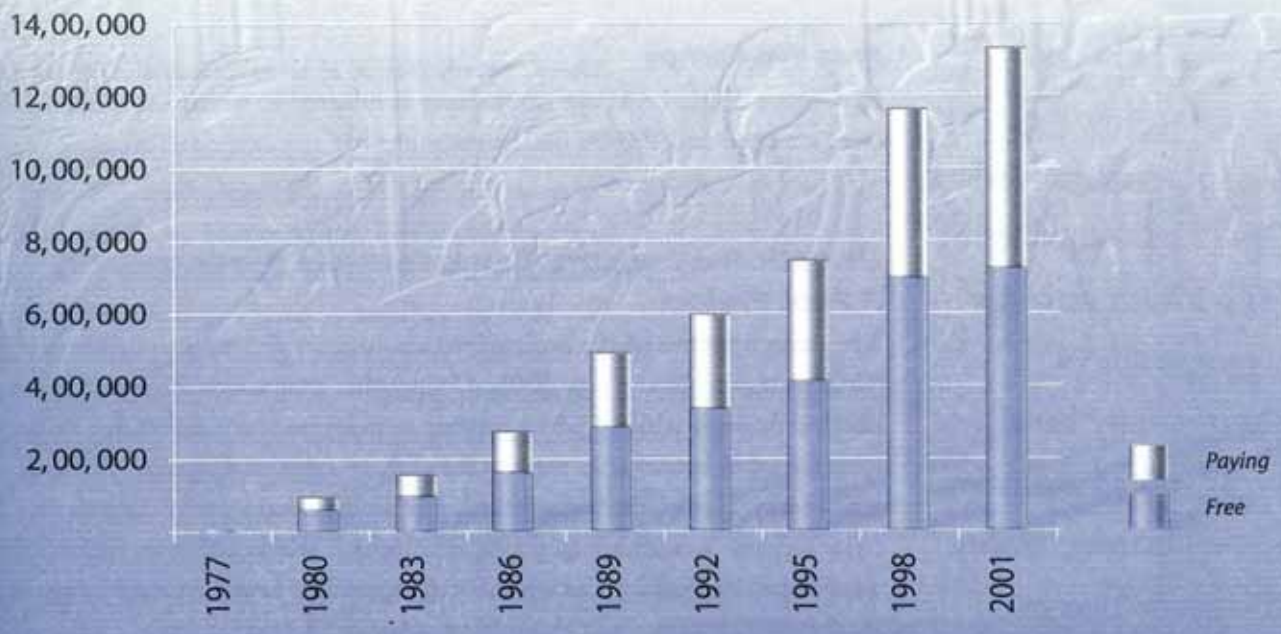
Statistics 2001

	Madurai	Tirunelveli	Theni	Coimbatore	Total
OUT-PATIENT VISITS					
Paying	261,116	118,897	37,285	186,502	603,800
Free (Direct & Camp)	318,123	138,711	42,237	226,139	725,210
SURGERY					
Paying	32,048	10,853	1,823	18,541	63,265
Free (Direct & Camp)	63,612	19,183	5,045	400,53	127,893
HOSPITAL OUT-PATIENT VISITS	399,239	173,757	54,798	278,819	906,613
EYE CAMP OUT-PATIENT VISITS	180,000	83,851	24,724	133,822	422,397
TOTAL OUT-PATIENT VISITS	579,239	257,608	79,522	412,641	1329,010
SCREENING CAMPS	515	374	140	452	1,481

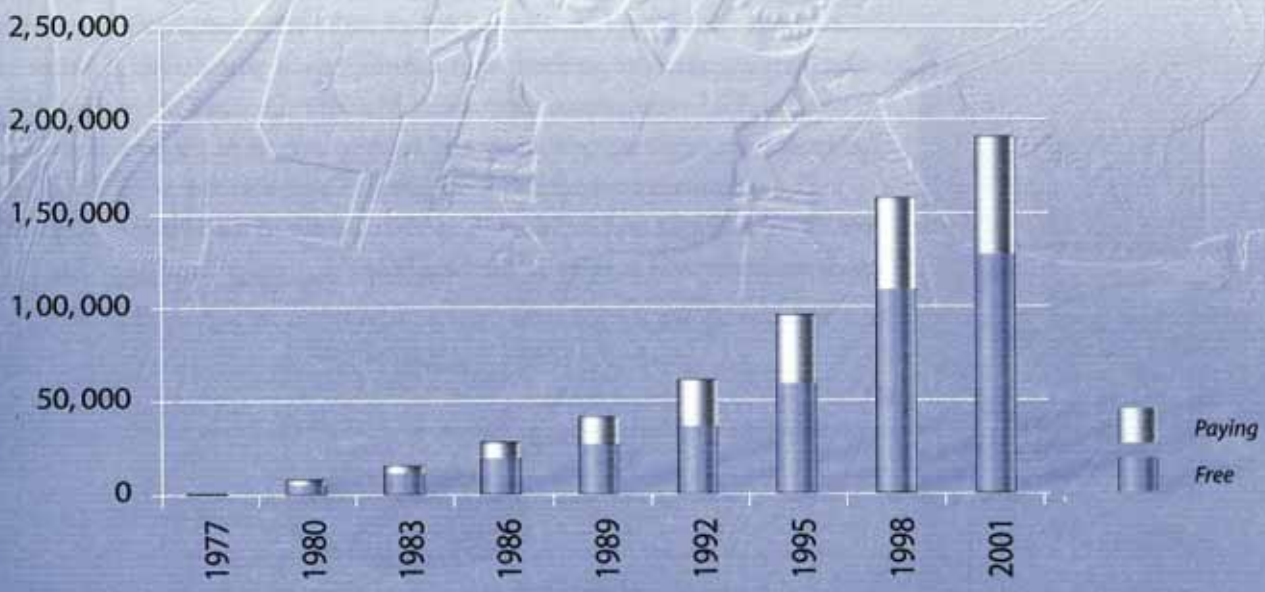
SURGERIES

Extra Capsular Cataract Extraction (ECCE) & other lens removal procedures without IOL	1,672	481	124	1,472	3,749
ECCE with IOL implantation	38,501	7,021	5,756	8,827	60,105
ECCE IOL implantation with phaco	9,795	3681	389	7,383	21,248
Small Incision Cataract Surgery	25,941	12,737	—	26,863	65,541
Trabeculectomy & combined procedures	1,331	625	65	942	2,963
Retinal Detachment	583	53	—	342	978
Vitreous surgery	500	27	—	568	1,095
Membranectomy	53	9	0	26	88
Squint correction	420	45	—	166	631
Keratoplasty	235	9	—	167	411
Pterygium	227	139	30	385	781
Ocular injuries	335	90	27	390	842
Orbitotomy	72	—	—	0	72
Ptosis	62	1	1	72	136
Lid & Socket reconstruction	661	144	35	191	1,031
Lacrimal surgeries	1,716	788	100	773	3,377
Other Orbit and Oculoplasty surgeries	280	31	21	12	344
Others	2,677	473	75	2,718	5,943
Laser procedures					
Laser photocoagulation	5,600	1,668	96	3,223	10,587
Nd. yag iridectomy	1,723	870	51	935	3,579
Nd. yag capsulectomy	2,363	1140	98	2,959	6,560
Argon Laser Trabeculopasty	—	4	—	0	4
LASIK refractive surgery	913	—	—	180	1,093
TOTAL	95,660	30,036	6,868	58,594	191,158

OUT PATIENT VISITS (1977-2001)



SURGERIES (1977-2001)



Community Outreach Programmes

Community awareness and involvement are vital to the success of any programme dealing with large volumes of patients. Community outreach activities such as eye camps, school screenings, community based referral systems and rehabilitation can increase productivity, quality of care and cost-effectiveness.



meal time at the new facility for camp patients

Free Eye Camps

In the year 2001, 1,481 eye camps were conducted in which a total of 422,397 people were screened and 88,600 underwent surgery.

Diabetic Retinopathy Management in the Community: A Pilot Project

The main objective of the project is to create an awareness about diabetic retinopathy in the community. In the year 2001, 45 screening camps were organised in the project districts through which 15,843 patients were screened for diabetes and 4,663 patients were found to be diabetic. Among the diabetic patients 866 were diagnosed with diabetic retinopathy. Out of those diagnosed, 174 diabetic retinopathy patients were advised for Laser surgery. In addition to this leaflets, posters and booklets on diabetic retinopathy were distributed during the seminars, symposiums, health education training, guest lectures, in the clinics and also during screening camps.

Village Volunteers Training

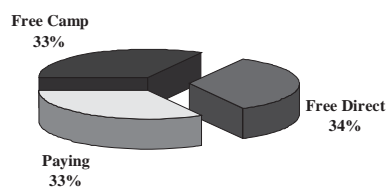
A one day training programme was conducted for volunteers from a tribal community from Arsha Vidya Gurukulam, Anaikatti, Coimbatore District.

The Aravind staff spoke to them on the importance of training, the prevalence of blindness, anatomy and physiology of the eye, various types of cataract, common eye diseases and the free screening camps.

Dr. P. Sathyan conducted a practical demonstration with the patients presenting them with examples of cataract eye before and after surgery, with and without IOL. He also demonstrated the methods of measuring visual acuity using E charts.

Mr. L.C. Uthamarajan, Operations Manager discussed the reasons that prevent patients from undergoing surgery and ways to overcome their resistance.

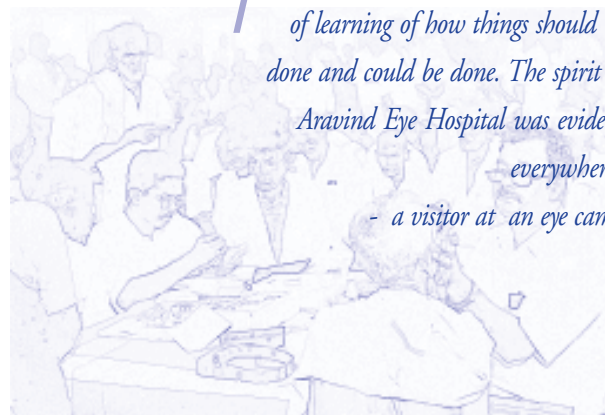
The volunteers covered about 40 tribal villages and the Aravind team consisting of a senior refractionist and social workers visited three of those tribal villages and the screened patients underwent surgery at the base hospital.



Surgeries 2001

Community Based Rehabilitation (CBR) Project - An Update

The CBR project undertaken by Aravind-Theni is supported by Sight Savers International. The third phase of the CBR project covered three blocks, Uthamapalayam, Cumbum and Bodinayakanur of Theni District covering a population of about 250,000. In these areas 240 incurably blind persons were identified and they are now receiving community-based rehabilitation by trained field workers. So far, 97 blind persons have been rehabilitated through orientation, mobility, independent daily living skills and personal care etc. Twenty six persons have been economically rehabilitated.



If for a casual observer it was a temple of learning of how things should be done and could be done. The spirit of Aravind Eye Hospital was evident everywhere.
- a visitor at an eye camp

Sponsors Meet

In order to acknowledge the contribution of the eye camp sponsors, annual sponsors meets are conducted at Aravind Eye Hospitals. In 2001, it was conducted in Aravind-Tirunelveli. Fifty two sponsors attended the meeting. Dr. G. Venkataswamy and Dr. G. Natchiar felicitated the gathering. Dr. R. Ramakrishnan welcomed the sponsors and highlighted the previous year's performance and congratulated the sponsors for their role in the achievements. This forms a good forum for the sponsors and the Aravind camp team to share and learn from each others experiences to further improve the functioning of the camps.



at a screening camp for school children

Eye Screening for School Children – 2001

During the year 2001, 53,802 children in 58 schools were screened for eye defects and 1,625 children were given glasses to correct their refractive errors.

	Madurai	Theni	Tirunelveli
No. of Schools	23	15	20
Teachers trained	158	65	71
Children screened	26, 202	10, 043	17, 557
Children with eye defects	1,213	473	902
Children with refractive errors	971	255	399

EYE CAMPS – 2001

SPONSORS	CAMPS	OUT-PTS.	CAT+IOL	OTHERS	TOTAL
Lions Clubs	439	154,390	31,854	1,090	32,944
Rotary Clubs	56	24,501	6,251	206	6,457
Vivekananda Kendra	60	11,785	2,419	95	2,514
Sri Satya Sai Samithi	75	19,655	5,088	164	5,252
Religious organisations	81	28,394	5,731	167	5,898
Junior Chamber	11	3554	457	23	480
Banks	16	4678	524	11	535
Mills and Factories	33	12,373	3,018	107	3,125
DBCS	166	23,665	6,084	167	6,251
Educational Insts.	81	17,967	2,564	78	2,642
Hospitals	71	16,473	2,930	107	3,037
Trusts	47	17,369	3,987	129	4,116
Youth and Fans Assn.	37	8,075	1,188	34	1,222
Other Vol.Orgns.	136	36,004	5,653	193	5,846
Others	172	43,514	8,066	215	8,281
TOTAL	1,481	422,397	85,814	2,786	88,600



Education and Training

Aravind's mission to combat blindness has led to the development of human resources as a major activity. The education and training programmes at Aravind Eye Hospitals are intended for all levels of ophthalmic teaching and training—for ophthalmologists, ophthalmic technicians, clinical assistants, outreach coordinators and health care managers.

ARAVIND POSTGRADUATE INSTITUTE OF OPHTHALMOLOGY

POSTGRADUATE TRAINING IN OPHTHALMOLOGY

In affiliation with,

—Dr. MGR Medical University, Chennai

• *Diploma in Ophthalmology (DO)*

Eight candidates graduated in 2001.

• *MS in Ophthalmology (MS)*

Four candidates graduated in 2001.

—National Board of Examinations, New Delhi

• *Diplomate of the National Board (Dip. NB).*

A total of nine comprising those doing the course after D.O. and three direct candidates successfully passed the final examination of the National Board in 2001.

—Royal College of Ophthalmology, London, UK

• *Membership of the Royal College of Ophthalmologists (MRCOph.)*

Two candidates passed part-I. In addition, six candidates received their FRCS.

FELLOWSHIP PROGRAMMES

In the year 2001, ten ophthalmologists underwent fellowship training programmes in various sub-specialties of ophthalmology (18 to 24 months).

Short-term Courses for Practising Ophthalmologists

IOL Microsurgery Training Programme

During 2001, a total of sixty-six ophthalmologists including one from Nigeria underwent this training at Aravind-Madurai, Aravind-Coimbatore and Aravind-Tirunelveli.

Lasers in Diabetic Retinopathy Management

The two courses including 'Training in Indirect Ophthalmoscopy' and 'Lasers in Management of Diabetic Retinopathy' are now being offered with support from the Lions SightFirst Programme as a combined course at Aravind-Madurai and Aravind-Coimbatore. Forty-two ophthalmologists have received this training in the year 2001.

Diagnosis and Management of Glaucoma

This course offered at Aravind-Madurai and Aravind-Tirunelveli trained forty candidates in 2001.

RECOGNITION FOR M.S/PH.D PROGRAMME

The Indian Institute of Technology, Chennai has recognised LAICO for the purpose of M.S / Ph.D registration under the external registration scheme.

Visiting Residents

Ophthalmology students from various institutions in USA come to Aravind as part of their residency programme. During the year 2001, residents from the following institutions were at Aravind: Kresge Eye Institute, Detroit; Wilmer Eye Institute, Baltimore; Mass. Eye & Ear Infirmary, Boston; St. Vincents Hospital, New York; New York Presbyterian Hospital, Cornell Medical Centre, New York.

CONTINUING MEDICAL EDUCATION PROGRAMMES AT ARAVIND & LAICO

CME Programme on Retina - Vitreous and Paediatric Ophthalmology & Strabismus

Aravind-Madurai, February 4

DR. SURESH CHANDRA

—*Current management of macular holes*

—*Overview of prevention and management of ARMD*

DR. DENNIS ROBERTSON

—*Phototoxicity of the retina from operating room microscope and intraocular light pipes*

—*Retinoblastoma - Secondary tumours, retinoblastoma with rhegmatogenous retinal detachment*

DR. THOMAS FRANCE

—*Optical penalization in the treatment of amblyopia*

—*Superior oblique palsy - diagnosis and treatment*

DR. LESLIE WEINGEIST FRANCE

—*Evaluation of diplopia in general ophthalmology practice*

Eighth Update for Postgraduate Students in Ophthalmology

Aravind-Madurai, February 4-10

This course was held for the postgraduate students in ophthalmology. Twenty-nine students from various parts of the country attended. They were exposed to both theory and practical sessions in all sub-specialties of ophthalmology. Two model examinations were held and the examiners were Dr. T. K. Ramesh, Minto Eye Hospital and Dr. Tirumalachar, Siddhartha Medical College, Karnataka.



Dr. G. Natchiar and other faculty with participants of the 8th update course

Biotechnology Workshop

Aravind-Coimbatore, March 14

This workshop was for students of SNR and Sons College, Coimbatore. Lectures and demonstrations were given on medical electronics and LASER technology with emphasis on LASIK, argon laser, yag laser, ultrasound A/B scan and phacoemulsification.

Skills for Economic Rehabilitation

Aravind-Theni, March 30-31

A two-day workshop on “Skills for Economic Rehabilitation” was organised for the CBR staff by Mrs. Lavanya, Low Vision Clinic, Aravind Eye Hospital, Madurai. Children with low vision studying under the Integrated Education Programme were screened and counselled.

Basic Eye Care and Common Eye Diseases

Aravind-Theni, April 5

This training programme was offered to thirty local Registered Medical Practitioners (RMP) of the First Aid and Rural Development Centre.

Workshop for Youth Volunteers

Aravind-Madurai, May 5

A one-day workshop was conducted for youth volunteers of Veppangulam village to train them to identify common eye disorders.

Symposium on Update in Ophthalmology for General Practitioners

Aravind-Theni, May 6

About 20 general practitioners participated in the symposium. Lectures were delivered on the following topics:

- Eye diseases in children*
- Diabetic Retinopathy*
- Corneal ulcers*
- Cataract-recent advances*
- Glaucoma*
- Common eye problems faced by general practitioners*

CME programme for Nurses

Aravind -Coimbatore, May 13

For the first time, a CME programme for nurses was conducted in Aravind. This programme taught nurses of the ward, operation theatre, refraction, outpatient department, and counselling, about other specialties like glaucoma, squint, retina, cornea, refractive errors, contact lens, LASIK etc. to which they were not previously exposed. Dr. A. Raghuram and Dr. Malini Raghuram organised the programme. Dr. Sekar, anaesthetist trained the paramedical staff in first aid.

Basic Skills in Counselling - A Workshop

LAICO, July 20 and 28

A workshop was conducted for the senior paramedical staff of Aravind Eye Hospitals—Madurai, Theni, Tirunelveli, and Coimbatore who underwent a six-month certification course on basic skills in counselling. The workshop focused on three topics covered in their curriculum (i.e) developing communication skills, analysis of the body language and psychotherapeutic needs of the customers. Prof. Jeyaprakasam and Prof. Anandavalli from Valliammal Institute, which offered the certificate course, conducted the workshop.



Dr. Ilango, Mr. R. Meenakshi Sundaram and Mr. Muthuramalingam with camp organisers, Mr. Rajagopal and other youth volunteers

CME on Lasers in Ophthalmology

Aravind-Madurai, July 28 -29

The CME programme aimed to update the participants on use of lasers in ophthalmology, with a focus on the basic physics behind lasers. It also discussed well-established and newer applications of lasers in the management of ocular disease and the economics of these systems.

DR. P. NAMPERUMALSAMY

—*Diabetic retinopathy- Challenges and solutions*

—*Venous occlusions*

DR. M. SRINIVASAN

—*LASIK- our experience*

—*New advances in refractive surgery*

DR. N.V. PRAJNA

—*Management of complications of refractive surgery*

DR. R.D. RAVINDRAN

—*Recent advances in laser cataract surgery*

DR. P. BALAKRISHNAN

—*Economics of lasers*

DR. V. NARENDRAN

—*Peripheral degenerations*

DR. R. RAMAKRISHNAN

—*Introduction to glaucoma*

—*Laser iridotomy and goniotomy - Indications, techniques, complications*

DR. R. KIM

—*ARMD*

DR. R. VENKATESH

—*Laser capsulotomy*

DR. D. SHUKLA

—*Lasers in diabetic retinopathy*

DR. MAHESWAR

—*Tumors/CSR/ROP/Optic disc pits*

DR. RODNEY MORRIS

—*Diagnostic lasers, Laser interferometry / CSLO / OCT*

DR. MOHIDEEN

—*Role of LTP in POAG management - Then and now*

DR. P. SATHYAN

—*Ancillary laser procedures in glaucoma*

DR. BALAMURUGAN

—*Role of cyclophotocoagulation in glaucoma - Present status*

DR. MAHESH KUMAR

—*Introduction to lasers*

Update in Ophthalmology for General Practitioners

Aravind- Madurai, August 4

The programme provided the general practitioners with an opportunity for professional interaction and an update of modern trends in medical technology.

DR. P. NAMPERUMALSAMY

—*Diabetic retinopathy - Current status*

DR. G. NATCHIAR

—*Cataract-What's New?*

DR. M. SRINIVASAN

—*Trauma and corneal ulcers*

DR. P. VIJAYALAKSHMI

—*Eye care in children*

DR. S. R. KRISHNADAS

—*Glaucoma- Diagnostic importance*

DR. S.R. RATHINAM

—*Leptospirosis in Madurai*

DR. R. KIM

—*Lasers in ophthalmology*

DR. N.V. PRAJNA

—*LASIK*

DR. USHA KIM

—*Oculoplasty - Newer developments*

DR. S. ARAVIND

—*Patient referral to Aravind*



Dr. M. Srinivasan in the CME on lasers in ophthalmology

Seventh IOL Microsurgery CME Programme

Aravind-Madurai, Coimbatore, Tirunelveli,

August 19-25

The seventh IOL microsurgery CME programme for practicing ophthalmologists was simultaneously organised at Aravind Eye Hospitals in Madurai, Coimbatore, and Tirunelveli. This year a SICS/PHACO workshop was conducted in addition to the regular workshop. The participants were involved in panel discussions and, they also observed live surgery demonstrations.

Small Incision Cataract Surgery (SICS) / Phacoemulsification Workshop

Aravind-Madurai, August 25

DR. R. VENKATESH

—*Instrumental vs SICS*

DR. JACOB MATHEW

—*Phacodynamics / techniques*

DR. MOHAN

—*Phaco in difficult situations with emphasis on role of phaco in vitreoretinal surgery*

—*Recent advances in phaco*

DR. N.V. PRAJNA

—*Complications of SICS/PHACO*

Ninth Update for Postgraduate Students in Ophthalmology

Aravind -Coimbatore, September 16-22

Twenty-three postgraduate students from all over India attended the update course. Theory classes and clinical discussions covered specialties such as Paediatrics, Orbit & Oculoplasty, Retina & Vitreous, Neuro Ophthalmology, Microbiology, Cornea, Glaucoma, Pathology, Uvea and Ocular Pathology. Clinical examinations were conducted for two days.

Symposium on Strabismus

Aravind-Madurai, October 20

This symposium focused on the scientific principles involved in judging when to conservatively manage squinting and when to intervene surgically. There were discussions and demonstrations on the evaluation and management of strabismus and amblyopia therapy, including the current thinking on medical, optical and surgical options.

DR. MARILYN T. MILLER

—*Childhood blindness*

—*Duane's retraction syndrome*

—*Solving problems on strabismus and amblyopia*

—*Treatment of congenital lateral rectus palsy*

DR. T.S. SURENDRAN

—*Statistics of amblyopia, types of strabismus-Institution based practice*

—*Esotropias in children*

—*Management of amblyopia in children and young adults*



Participants of the Seventh IOL Microsurgery programme (Madurai) with Dr. G. Venkataswamy, Dr. G. Natchiar, and Dr. P. Namperumalsamy



Dr. Marilyn T. Miller with Dr. G. Venkataswamy and Dr. P. Vijayalakshmi

DR. KALPANA NARENDRAN

—*Visual acuity estimation in children*

—*Double elevator palsy*

DR. SUMITHA AGARKAR

—*Etiology of strabismus and best sensory tests*

DR. P. VIJAYALAKSHMI

—*Motor evaluation of concomitant strabismus*

—*Tips in the management of exotropias*

—*General considerations in surgical management of concomitant squint*

—*Diagnosis and management of fourth nerve palsy*

—*Pre and postoperative case presentations and discussions on its management with video*

DR. SANTHAN GOPAL

—*Misconceptions in strabismus and cure*

—*Alphabet patterns*

—*Oblique dysfunction and Brown's Syndrome*

—*Role of orthoptics in management of convergence insufficiency, fusion and accommodation weakness*

DR. KULDEEP KUMAR SRIVASTAVA

—*Microtropia- Its importance*

—*Guidelines on examination of incomitant squint*

DR. ELIZABETH JOSEPH

—*Adjustable suture technique in strabismus*

DR. LIONEL KOWAL AND DR. SHIVRAM NADKARNI

—*Learning difficulties of an ophthalmologist*

—*Refractive surgery and double vision*

DR. K.P. MANJUNATH

—*Options in third nerve palsy*

DR. SAPNA JAIN

—*Botox in 2001*

TTK Ophthalmic Association Meeting

Aravind -Tirunelveli, December 2

Clinical meeting of Ophthalmologists of TTK (Tirunelveli, Tuticorin and Kanyakumari) districts was held at Aravind Eye Hospital, Tirunelveli. DR. MANEKSHA gave a talk on “*Preventive Aspects in Postoperative Endophthalmitis*” and DR. MEENAKSHI gave a speech on “*Congenital Esotropia- Clinical Features, Diagnosis and Management*”.

INTERNATIONAL AGENCY FOR PREVENTION OF BLINDNESS MEETINGS

As the Regional Chairman of International Agency for the Prevention of Blindness, Southeast Asia Region (IAPB- SEAR), Mr. R.D. Thulasiraj attended the following meetings.

IAPB Executive Committee Meeting

Geneva, February 20-23

The Executive Board met to discuss the issues relating to IAPB and the Vision 2020 initiative at the global level. While there, Mr. R. D. Thulasiraj also participated in the IAPB Partnership meeting, which is an annual meeting of the various NGO's involved in eye care.

IAPB Regional Co-ordination Committee Meeting

Bangkok, February 27 to March 2

This was the first meeting of the newly formed group consisting of Government representatives from the countries and International NGO's who are active in this region. At this meeting the importance of developing national action plans was stressed and target dates were agreed upon for completing this task. Several inter-country projects were identified during the meeting.

IAPB-SEAR Third Regional Assembly Meeting

L.V. Prasad Eye Institute, Hyderabad, October 1-3

Organised by the IAPB-SEAR secretariat at LAICO, this was the first regional assembly following the launch of the global initiative Vision 2020—The Right to Sight, which was the theme of the assembly. The meeting addressed many of the issues and challenges relating to delivery of eye care services within the framework of Vision 2020. The Regional Director of WHO-SEAR Dr. Uton Muchtar Refei delivered the inaugural address. Dr. Pararajasegaram and Dr. Madan Upadhyaya gave the global and regional overview of Vision 2020.

The main objectives of this assembly were:

- To propagate the concept of Vision 2020 - The Right to Sight
- To give the current status and the scope of Vision 2020 at the global and regional level
- To address the issues and challenges related to implementation of this global initiative

Through the use of both instruction courses and scientific sessions, all the major issues relating to Vision 2020 were discussed. The plenary session at the assembly included a question-answer session on several controversial issues in eye care, a presentation on disease control strategies, free papers, sessions on human resource development, capacity building and emerging priorities of INGDO's.

A total of 160 delegates participated in this assembly representing government, voluntary eye hospitals, private practitioners, INGDO's and individuals working in the area of eye care. Of this number, 110 were Indian delegates.



Mr.R.D.Thulasiraj in discussion with the IAPB SEAR regional co-ordination group, Bangkok

Instruction courses were conducted on cataract surgery, equipment purchase and maintenance, refraction service and group practice.

MR. R.D. THULASIRAJ

Session on cataract surgery

—*Overview of cataract blindness in the region with specific details on India*

DR. G. NATCHIAR

—*Current Issues in Vision 2020- what are the current expectations of patients and what should be the ideal, unaided visual outcome following cataract surgery*

DR. R.D. RAVINDRAN

Session on cataract surgery

—*Cost effective techniques for large volume cataract surgery*

—*Quality monitoring initiative in cataract surgery*

Session on group practice

—*Capacity building in group practice*

PROF. V. SRINIVASAN

Convenor of the instructional course on equipment purchase and maintenance

DR. P. BALAKRISHNAN

Session on equipment purchase and maintenance

—*Ophthalmic equipment management*

The speakers of the regional assembly session included

DR. G. NATCHIAR

Session on disease control strategies

—*Cataract*

MR. S. SARAVANAN

Session on organisational capacity building

—*Capacity building in eye hospitals - an experience with 120 hospitals*

Session on initiatives and issues in human resource development

MR. R.D. THULASIRAJ

—*Present scenario and future need in LAICO, Aravind Eye Hospital, Madurai.*

DR. USHA

—*Ophthalmic technicians and nursing training*

MR. A.K. SIVAKUMAR

—*Eye care managers training*

MR. A. MANIKANDA SELVAN

—*Need for this cadre - HRD, skills imparted-curriculum facility*

MS. A.S. MEENACHI

—*Local production, cost of fabrication, sourcing-town and large scale*



Dr. R.D. Ravindran and Mr. R.D. Thulasiraj at the IAPB-SEAR Third Regional Assembly Meeting

CONFERENCES ATTENDED ELSEWHERE

All India Ophthalmological Society Conference

Science City, Calcutta, January 4–7

DR. G. NATCHIAR

—Evaluation of visual outcome in cases of traumatic cataracts operated by manual small incision cataract surgery

DR. M. SRINIVASAN

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

DR. R. RAMAKRISHNAN

—Convenor: Instruction course on update in medical management of primary open angle glaucoma

Symposium:

—Current concepts in glaucoma management

MR. R.D. THULASIRAJ

—Convenor: Vision 2020—Right to Sight

DR. S.R. RATHINAM

—Uveitis update

—Pseudomonas scleritis without keratitis

DR. R.D. RAVINDRAN

—ECCE vs small incision ECCE in phacolytic glaucoma

—Results of phaco triple in PACG

DR. V. NARENDRAN

—Ocular trauma – Management and prognosis

—Cataract extraction with IOFB removal— A combined approach

DR. R. KIM

—Endophthalmitis after penetrating injuries with retained IOFB

—Endophthalmitis – Experience from a referral centre

DR. KALPANA NARENDRAN

—Visual outcome in unilateral paediatric cataract

—Efficacy of conventional occlusion therapy in amblyopia —Our experience

DR. REVATHI RAJARAMAN

—Severe plastic anterior uveitis after phacoemulsification – A study of 85 cases

—Outcome of hospitalised medical and surgical management of fungal keratitis

—Limiting factors for visual outcome in PKP for bullous keratopathy

DR. MEENAKSHI

—A profile of ocular injury in children

DR. USHA KIM

—Scleral strips for frontalis suspension

—An analysis of orbital fractures

—Orbital dermoids

DR. ANUP CHIRAYATH

—Phaco cocktail for hard cataracts (video)

—Supra capsular phaco for posterior polar cataracts (video)

DR. P.M.T. MOHIDEEN ABDUL KADER

—Steroid induced glaucoma in spring catarrh – A heavy price for negligence

DR. AVNINDRA GUPTA

—Drainage of idiopathic premacular subhyaloid haemorrhage with argon laser

—Management of clinically significant macular edema by laser photocoagulation

—Amphotericin B anterior chamber lavage following fungal endophthalmitis

DR. VIBHA SHARMA GUPTA

—Clinical presentation and prognosis of postoperative Nocardia endophthalmitis

DR. SURESH PUTHALATH

—Incidence of secondary cataract in pseudoexfoliation syndrome

DR. P. SATHYAN

—Prostaglandin: Where it stands

—Target IOP & Strategies to reach target IOP

—Clinical update on latanoprost

—Prostaglandin & its utilities

—Results of phaco triple in PACG

—No flap Phaco trab

DR. L.V. SHANMUGANATHAN

—ECCE vs small incision ECCE in phacolytic glaucoma

DR. ANITA RAGHAVAN

—Ocular surface manifestations of MGD (Meibomian Gland Dysfunction)

DR. KULDEEP KUMAR SRIVASTAVA

—Surgical results of congenital esotropia bi-medial recession vs uniocular recession/ resection

DR. ARUN SAMPRATHI

—Is probing effective in older children?

DR. RAMESH MURTHY

—Timolol provides better blunting of intraocular pressure (IOP) spikes following Nd: Yag capsulotomy compared to brimonidine

DR. SASI KUMAR DEVARAJ

—Endothelial cell loss following phacoemulsification and manual small incision cataract surgery – A comparison

DR. AHUJA VIJAY KUMAR

—Clinical profile on patterns of uveitis in Southern Tamil Nadu

DR. T. RAVEENDRA

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

DR. BINA KULKARNI

—*Evaluation of visual outcome in traumatic cataract cases operated by SICS surgery*

MR. M. JAYAHAR BHARATHI

—*A study on the aetiological analysis of endophthalmitis*
—*Association between the PR-disposing factors and microbial isolates in corneal ulcers in South India*

POSTER

DR. R. RAMAKRISHNAN, DR. ANUP CHIRAYATH, DR. MEENAKSHI AND MR. JAYAHAR BHARATHI
—*Microbial keratitis in children*

Seminar on Eye Hospital Administration

Mannar Thirumalai Naickar College, Madurai, January 10

MR. A.K. SIVAKUMAR

—*Marketing in Health Care*
—*Fund Raising*
—*Social Marketing*

MR. R. MEENAKSHI SUNDARAM

—*Community Outreach Programmes*

Small Incision Cataract Surgery (SICS) Workshop

Surabaya Undaan Eye Hospital, Indonesia, January 27-28

DR. G. NATCHIAR

—*Why SICS and what are the advantages?*
—*Tunnel construction*
—*Learning curve of SICS*
—*Complications of SICS*
—*When and how to convert? (Question & Answer session)*
—*Postoperative cases—Demonstration*

DR. MOHAN

—*Capsulotomy and hydroprocedure (Phaco and SICS)*

—*Nuclear removal and management of cortex*

—*SICS in difficult situations*

—*Manual SICS in comparison with phaco (Question & Answer session)*

—*Secondary implantation through scleral tunnel*

Surgical session

—*Instrumental phacoemulsification*

—*SICS in small pupil*

Women Empowerment Camp

Rose Mary College, Palayamkottai, January 30

DR. R. RAMAKRISHNAN

—*Eye care in the new millennium*

IND-VFQ Review Meeting and Training

Dr. R.P. Centre for Ophthalmic Sciences, New Delhi, February 1-2.

The review meeting was held to mark the end of Phase I during which the IND-VFQ questionnaire was finalised.

Dr. Astrid Fletcher and Ms. Martine Donoghue, consultants of the study, London School of Hygiene and Tropical Medicine; and the participating research study teams from R.P. Centre for Ophthalmic Sciences, Delhi; Sarojini Devi Eye Hospital, Hyderabad; and the Aravind Eye Hospital, Theni were present. Mr. R.D. Thulasiraj, Collaborating Investigator, and Ms. Preethi Pradhan and Mr. Vijayakumar, Project co-ordinators, represented Aravind. The next phase of the project will involve testing the reliability and responsiveness of the questionnaire.

During the meeting Dr. Astrid Fletcher recommended Mr. Vijayakumar to train the interviewers from the three



Dr. G. Natchiar and Dr. P. Mohan with staff of Surabaya Undaan Eye Hospital, Indonesia

Conferences Attended Elsewhere

centres for Phase II of the study.
The training was provided at LAICO
from February 22-24.

Annual meeting of International Uveitis Study Group

Chennai, February 2-3

DR. S.R. RATHINAM

—*Leptospirosis—an emerging infectious
uveitis*

Symposium on Intraocular Inflammation

Sankara Nethralaya, Chennai,
February 4-5

DR. S.R. RATHINAM

—*Leptospiral uveitis*

Low Vision Awareness Programme

LVP Eye Institute, Hyderabad,
February 5-6

MRS. LAVANYA RAJ, Low Vision and
Rehabilitation Services Co-ordinator
attended the workshop.

Annual Conference of the Vitreoretinal Society

Jaipur, February 6

The vitreo-retinal society members from
all over India participated.

DR. V. NARENDRAN

—*Epidemiology of AMD in India in the
symposium on AMD*

DR. D. SHUKLA

—*X linked retinoschisis*

DR. B. MAHESWAR

—*Visual outcome following successful
diabetic vitrectomy*

DR. V. RAGHURAMAN

—*RD following silicone oil removal*

XX International Vitamin A Consultative Group (IVACG) and 2001 International Nutrition Anaemia Consultative Group (INACG) Meeting

Hanoi, Vietnam, February 9-18

DR. LAKSHMI RAHMATULLAH AND

MS. SHEELA DEVI attended the meeting to
present details of the Vitamin A

Supplementation in Newborns (VASIN)
Study. Dr. Lakshmi spoke on 'Policy
implication of the VASIN study' and Dr.
James Tielsch of John Hopkins University
presented the VASIN data.

Workshop on Vision 2020

Dr. R.P. Centre for Ophthalmic Sciences,
AIIMS, New Delhi, February 10-11

DR. G. NATCHIAR

—*Disease control focusing on cataract*

DR. P. VIJAYALAKSHMI

—*Disease control focusing on childhood
blindness*

MR. R.D. THULASIRAJ

—*Eye care infrastructure related to human
resource development*

Oculoplasty 2001 - Multi Faculty Meet

World Trade Centre, Bombay,
February 11

DR. USHA KIM

—*Botulinum toxin in oculoplastics*

GlaSICS 2001—Update on Glaucoma & Small Incision Cataract Surgery

Sankara Eye Hospital, Coimbatore,
February 11

DR. R.D. RAVINDRAN

—*Small Incision Cataract Surgery, our
technique—Aravind Eye Hospital*

—*Surgical audit for cataract—A model for
quality control*

DR. S.R. KRISHNADAS

—*Interpretation of automated visual fields*

—*Approach to a patient with POAG*



Ms. Sheela Devi, Dr. Lakshmi Rahmatullah, Dr. James Tielsch and Dr. Joanne Katz in Hanoi

XIV Workshop on Hospital and Health Services Management

Christian Medical Association of India, Bangalore, February 12-13

MR. A. K. SIVAKUMAR

—*Materials Management in Hospitals*

Workshop on Low Vision Aids

Elite School of Optometry/Sankara Netralaya, Chennai, February 17

MRS. LAVANYA RAJ, Low Vision and Rehabilitation Services Co-ordinator attended the workshop.

Heidelberg's Retinal Tomography Meeting

L.V. Prasad Eye Institute, Hyderabad, February 22

DR. R. RAMAKRISHNAN attended the meeting.

International Symposium on LASIK and Laser Phaco

Hyderabad, February 24-25

DR. R. REVATHI attended the symposium.

CME in Orbit and Neuro-ophthalmology

Comtrust Hospital, Calicut, February 25

DR. G. NATCHIAR

Chaired the neuro-ophthalmology session

DR. USHA KIM

—*Clinical manifestations of orbital diseases*

Seminar on Quality Management

CSI College for Women, Madurai, February 28

MR. A. K. SIVAKUMAR

—*Quality Management*

Lecture on Diabetic Retinopathy for Lions Club Members

Vasanthanagar, Madurai, February 28

MR. K. KALIYAPERUMAL, IEC Expert, LAICO

—*Diabetes and Diabetic Retinopathy, its magnitude and management.*

Awareness Programme on Eye Care and Eye Diseases

(Sponsored by Indian National Science Academy-Local Chapter and co-sponsored by Aravind Eye Hospital, Madurai)

Lady Doak College, Madurai, March 2

The programme was organised for N.S.S volunteers. Dr. P. Namperumalsamy, Director, Aravind Eye Care System, inaugurated the session where Aravind staff members delivered lectures on various aspects of eye care.

Radiology Meet

Tirunelveli, March 4

DR. USHA KIM

—*Ultrasonography in orbit*

CME on Glaucoma Update

Solapur Ophthalmic Society, Solapur, Maharashtra, March 11

DR. R. RAMAKRISHNAN

—*Early diagnosis of glaucoma*

—*Principles of medical treatment of glaucoma*

—*Newer glaucoma drugs*

—*Lasers in glaucoma management*

—*Small incision combined surgery*

DR. S.R. KRISHNADAS

—*Gonioscopy in glaucoma diagnosis and management*

—*Interpretation of automated visual fields*

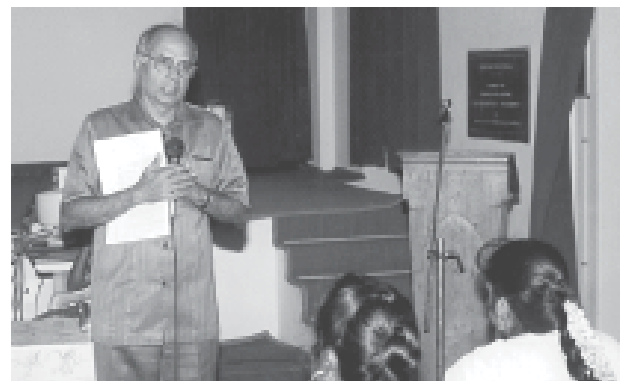
—*Newer advances in glaucoma surgery*

Guest Lecture for Management Students

The American College, March 15

DR. S. ARAVIND

—*Health care- A business perspective*



Dr. VR Muthukkaruppan delivering a lecture at Lady Doak College, Madurai

Conferences Attended Elsewhere

Third International Symposium on Ophthalmology in the Developing World

San Francisco, USA, March 23-25

DR. P. NAMPERUMALSAMY,

DR. M. SRINIVASAN,

DR. S.R. RATHINAM and Ms. BRINDA

PRIYADARSHINI attended.

DR. M. SRINIVASAN

—*Corneal ulceration in South India:*

Strategies for treatment

—*The Aravind experience in India: From eye camp to IOLs*

DR. S.R. RATHINAM

—*HIV/AIDS – The Indian experience*

Chennai Ophthalmic Association Meeting

Appasamy Hospital, Chennai, March 24

DR. P. SATHYAN

—*Glaucoma medical management*

Seminar on Virtual Instruments

(Organised by National Instruments, a Texas-based company)

P.S.G. College of Technology,

Coimbatore, March 26

PROF. V. SRINIVASAN and Ms. R. M. SUSILA attended the seminar.

Cochin Ophthalmic Association

Cochin, March 31

DR. P. SATHYAN

—*Recent advances in glaucoma medication*

Symposium on Small Incision Cataract Surgery

Erode Ophthalmic Association,

Erode, April 1

DR. R.D.RAVINDRAN

—*Phaco sandwich technique*

—*Manual SICS vs ECCE*

Friends of Fred Forum

Bangkok, Thailand, May 9-12

At the invitation of the Fred Hollows Foundation, Australia, Dr. G. Venkataswamy and Dr. P. Balakrishnan participated in the “Friends of Fred Forum” held in Thailand.

Dr. V. presented the keynote address highlighting the Aravind model of delivering high volume cataract surgery at affordable cost and the approaches for replicating this model by partners of the foundation.

Dr. P. Balakrishnan participated in a number of sessions and discussions related to IOL production, appropriate technology, equipment maintenance, servicing and surgical supplies.

They also visited the Essilor plastic spectacle-lens molding plant in Bangkok.

SEVA Foundation Meeting

USA, May 10-24

Mr. R. D. Thulasiraj visited the US primarily to attend the planning meeting for the sight activities of the Seva Foundation and also participated in the SEVA board meeting.

Annual Meeting of the Association for Research/Vision in Ophthalmology

Fort Lauderdale, Florida, April 29 -May 4

DR. P. SUNDARESAN attended the meeting.

DR. P. SATHYAN, DR. S.R. KRISHNADAS

and DR. R. RAMAKRISHNAN

(IN ABSENTIA)

—*Additivity of beta-blockers to latanoprost in primary open angle glaucomas*

Eye Trendz Conference

(organised by Lotus Eye Hospital)

Ooty, May 11-13

DR. P. NAMPERUMALSAMY

—*Epidemiology of diabetic retinopathy.*

DR. R.D. RAVINDRAN

—*Surgical audit*



Dr. G. Venkataswamy and Dr. P. Balakrishnan at the Friends of Fred Forum held in Thailand.

DR. V. NARENDRAN

—*FFA in diabetic retinopathy*

DR. KALPANA NARENDRAN

—*Intraoperative complication of SICS*

DR. S. ARAVIND

—*Patient perception*

—*Patient satisfaction and productivity*

Glaucoma in the 21st Century

(organised by Pharmacia)

Palma De Mallorca, Spain, May 24-27

DR. R. RAMAKRISHNAN, *participated in the international conference. He presented a poster titled “Comparative analysis of results of phacotrabeculectomy versus manual phacotrabeculectomy”*

Asia Pacific Region Workshop on Low Vision

Hongkong Society for the Blind,
Hongkong, May 28-30

DR. P. VIJAYALAKSHMI *participated in the various discussions with several groups on facilities and equipment available for patients with low vision to use their residual vision to the maximum extent possible.*

CME in Ophthalmology

Raja Muthaiah Medical College,
Chidambaram, June 2

DR. R. VENKATESH

—*Recent advances in cataract surgery*

DR. RODNEY MORRIS

—*Diabetic Retinopathy*

International Colloquium for Ophthalmology in Developing Regions

Zurich, June 15-18

The colloquium was organised by the Swiss Ophthalmic Society and co-sponsored by CBM—Switzerland.

MR. R. D. THULASIRAJ

—*Cataract Problem in India*

—*Effective Strategies to Reduce Cataract Backlog—The Aravind Experiment.*

DR. R. D. RAVINDRAN

—*Cost effective surgical technology and systems for high quality, large volume cataract surgery*

CME Programme on Diabetic Retinopathy

Cosmopolitan Hospital, Trivandrum,
June 17

DR. P. NAMPERUMALSAMY *attended the programme and also inaugurated the diabetic retinopathy clinic of the hospital. He gave a talk on*

—*Medical management of diabetic retinopathy*



Dr. Venkatesh and Dr. Rodney Morris at the Raja Muthaiah College

Salem Ophthalmic Association 2001

Nala Hotel, Salem, July 1

DR. P. SATHYAN

—*Target IOP & newer trends in glaucoma management*

Workshop on Effective Management of Quality Patient Care

(organised by the College of Nursing, Dhamtari Christian Hospital & Government of India and Christian Medical Association of India) Dhamtari Christian Hospital, Dhamtari, Chattisgarh, July 18

MR. A.K. SIVAKUMAR

—*Quality Management*

Workshop on Sustainability

Pali Sewa Mandal, Pali Marwar,
Rajasthan, July 18

DR. PRAVEEN NIRMALAN

—*Magnitude of blindness*

MR. S. SARAVANAN

—*Sustainable eye care*

5th International Advanced Vitreoretinal Surgery Course (IAVRSC)

Mumbai, July 20-22

DR. P. NAMPERUMALSAMY

—*Epimacular surgery*

—*Combined vitreoretinal surgery and anterior segment surgery*

—*Chairman for the session on “Macular surgery”*

Conferences Attended Elsewhere

DR. R. KIM

- Epidemiology and prevention of endophthalmitis
- Co-chairman for the session on “Diabetes and vascular retinopathy”

International Symposium on Advances in Glaucoma

International Academy for Advances in Glaucoma and Mumbai

Ophthalmologists Associates, Mumbai, July 26-29

DR. S.R. KRISHNADAS participated in panel discussions and chaired scientific sessions.

- Approach to a patient with POAG
- Antifibrosis in glaucoma filtering surgery
- Outcome of trabeculectomy
- Basics of gonioscopy
- Normal pressure glaucoma
- Exfoliation glaucomas
- Small Incision Cataract Surgery in glaucoma

Workshop on Small Incision Cataract Surgery

Regional Institute of Ophthalmology
Chennai, August 4

DR. R.D. RAVINDRAN

- Management in difficult situations and complications.

DR. R. VENKATESH

- Hydrodissection and Nucleus delivery

Workshop on Paediatric Ophthalmology and Strabismus

CBM Ophthalmic Institute, Little Flower Hospital, Angamaly, August 5

DR. P. VIJAYALAKSHMI

- Amblyopia and its management

DR. R. RAMAKRISHNAN

- Surgical management of congenital glaucoma

Symposium on Uveitis

Department of Ophthalmology,
Government Rajaji Hospital, Madurai,
August 17

DR. S.R. RATHINAM

- Leptospiral uveitis

VII Retina Congress

L.V.P. Eye Institute, Hyderabad,
August 24

DR. P. NAMPERUMALSAMY

- Programming and planning of DR Survey
- Role of scleral buckling surgery in the era of vitrectomy

Chinese Ophthalmology Association Meeting

Beijing, China, August 29–September 10

DR. S. ARAVIND

- How the Aravind model works

International Laser Society Meeting - Vitreoretinal Symposium

Chennai, August 30

DR. P. NAMPERUMALSAMY

- Techniques & results of laser photocoagulation in CRVO, BRVO

49th Tamil Nadu Ophthalmic Association Conference

Ooty, September 7-9

DR. P. NAMPERUMALSAMY

Chairman for the session on Directions for the 21st Century Symposium on Diabetic Retinopathy

- Prevalence and screening

DR. G. NATCHIAR

Chaired the session on neuro-ophthalmology for general ophthalmologists

- Field defects – How does that help in diagnosing neuro-ophthalmic cases?



Dr.S.Aravind with the Associates of the Chinese Ophthalmology Association, China

DR. M. SRINIVASAN

- Chaired the session on infectious keratitis and management strategies*
- Non-healing corneal ulcer*
- Surgical management of infectious keratitis*
- The future of an unfortunate young girl with bilateral advanced Mooren's ulcer*
- Management of traumatic globe rupture and cataract after radial keratotomy (video)*

DR. P. VIJAYALAKSHMI

- Chaired the free paper session on orbit and trauma*
- Chaired the session on paediatric ophthalmology*
- Clinical manifestations of congenital rubella syndrome*
- How would you manage a lost muscle in squint surgery*

MR. R. D. THULASIRAJ

- Session on stalwarts speak: Directions for the 21st century*
- Community Ophthalmology in 21st century*

DR. R.D. RAVINDRAN

- Chaired the symposium on Small Incision Cataract Surgery*
- Transition to SICS*
- Symposium on safe and simple ECCE*
- Prevention of endophthalmitis*

DR. R. RAMAKRISHNAN

- Symposium on state-of-the-art in phacoemulsification*
- Phaco in difficult situations*
- Symposium on current trends in the management of glaucoma*
- Advances in lasers in glaucoma*

DR. N.V. PRAJNA

- Moderator for the session on overview of refractive surgery*

Symposium on overview of refractive surgery

- Preoperative evaluation for refractive surgery*

DR. R. KIM

Co-chaired the free paper session on Retina-1

Symposium on orbit and trauma

- Penetrating injuries of the eye*
- Rhegmatogenous retinal detachment with a single superior horse shoe tear - pneumo-retinopexy (debate session)*

DR. USHA KIM

Moderator for the session on orbit and trauma

- Socket injuries*
- Patient information, informed consent forms – How essential are they in day-to-day practice? (Rapid-fire session)*

DR. S.R. KRISHNADAS

Co-chaired the free paper session on Glaucoma - 2

DR. V. NARENDRAN

Moderator for the free paper session- Retina-2

DR. KALPANA NARENDRAN

Co-chaired the session on paediatric ophthalmology

- Symposium on paediatric ophthalmology*
- Ocular manifestations of prematurity in children*
- Surgical outcome for Duane's retraction syndrome*

- Comparison of visual outcome of occlusion therapy in strabismic amblyopia and anisometropic amblyopia*

DR. R. VENKATESH

- Irrigating vectis removal technique*
- Capsular tension ring—Intraoperative tool for safe phacoemulsification in traumatic subluxated cataracts (video)*

DR. ANUP CHIRAYATH

Symposium on Small Incision Cataract Surgery

- Capsulotomy technique and nuclear prolapse*

DR. BALAMURUGAN

—Long-term clinical course of primary angle closure glaucoma in Tamil Nadu population

DR. V.A. JAISON

- Phaco fracture technique*
- Dacryocystorhinostomy with intraoperative mitomycin*

DR. KULDEEP KUMAR SRIVASTAVA

Symposium on paediatric ophthalmology

- Management of congenital dacryostenosis*

DR. P. SATHYAN

Moderator for the free paper session on Glaucoma-1

- Primary open angle glaucoma management – Medical treatment*
- Phacofoldable in different types of mature cataract with trypan blue (video)*

DR. S.R. RATHINAM

Co-chaired the free paper session on Uvea and the session on Uveitis

- Panuveitis with neuroretinitis (Leptosira)*

DR. ILANGO

- Outcome of diode laser cyclophotocoagulation in eyes with refractory glaucoma (Dr. C.P. Gupta Best Paper Award Session)*

DR. KAMALPREET LIKHARI

- Bilateral occult parafoveal telangiectasia: A case of mistaken identity (Dr. C.P. Gupta Best Paper Award Session)*

Conferences Attended Elsewhere

DR. MALINI RAGHURAMAN

—Severity of anterior segment trauma, management strategies, outcome – A correlation

—Cornea – Retina syndrome – An analysis of 8 cases

DR. MINU M. MATHEN

—Ocular trauma – Epidemiology, visual outcome and prognosis

—Infective endogenous scleral abscess – A series of four case reports

DR. RAJESH PAREKH

—Clinico – Pathological study of malignant lacrimal gland tumours

DR. B. MAHESWAR

—Role of primary scleral buckling during scleral tear repair

DR. V.R. SARAVANAN

—Glaucoma following silicone oil tamponade

—Postoperative endophthalmitis – Microbiological profile and treatment outcome

DR. A. RAGHURAMAN

—Visual recovery following treatment with IV methylprednisolone VSIV dexamethasone in cases of optic neuritis

—Is progressive additional lens an ideal alternative to bifocals?

DR. V. RAGHURAMAN

—Silicone oil removal: Results, risks and complications

—Neovascular complication after central retinal vein occlusion

DR. PRADEEP SINGH

—Traumatic endophthalmitis – Management and prognosis in a referral centre

DR. PURANDHAR REDDY

—Visual outcome and complications of manual SICS (phaco sandwich) in advanced cataracts

DR. ANAND RAJENDRAN

—The visual outcome in a series of primary AC-IOL implants

DR. R. SUDHA

—The exfoliation syndrome and cataract related complications – Analysis

DR. THIRUVENGADA KRISHNAN

—Postoperative endothelial cell loss following secondary IOL implantation

DR. MOHIDEEN ABDUL KADER

—IOP titration following trabeculectomy in early postoperative period by argon laser suturolysis (ASL)

—Bleb related endophthalmitis following GFS with MMC

DR. L. V. SHANMUGANATHAN

—Evaluation of postoperative astigmatism and IOP following phaco triple with foldable lens

DR. NILESH V. JAIN

—Visual outcome and intraocular pressure control after phaco triple with mitomycin C in pseudoexfoliation glaucoma

DR. ANAND PARTHASARATHY

—Comparative study of the postoperative intraocular pressure (IOP spike) in one site vs. twin site phaco trabeculectomy

—Ehlers Danlos syndrome – An uncommon syndrome with ocular manifestations – A review of 5 cases

MR. JAYAHAR BHARATHI

—Microbiological review of contact lens associated microbial keratitis

DR. K. KIRUBA

—Topical acetazolamide – An additive trial to timolol in treatment of glaucoma

DR. RODNEY MORRIS

—Bilateral retinoblastoma – Modes of presentation and management

DR. SACHIN MATHEW GEORGE

—Conservative treatment of the only eye in bilateral retinoblastoma

DR. THOMAS MATHEW

—Secondary posterior chamber intraocular lens implantation in paediatric patients

DR. S. RAMAKRISHNAN

—Myopic shift following paediatric IOL implantation

DR. K. SUNDARESH

—Intraoperative complications and visual outcome following phacoemulsification in posterior polar cataracts

DR. GURDEEP SINGH

—Incidence of retinal detachment following Nd: Yag capsulotomy

—Who detected the problem first?

DR. RAJASEKHAR

—Intraocular cysticercosis and its management

DR. MANEKSHA

—A survey of visual impairment and blindness, in rural southern India

DR. MOHAN

—Different uses of Capsular Tension Ring in Small Incision Cataract Surgery (video)

POSTERS

DR. MINU M. MATHEN

—Orbital sarcomas presenting as proptosis – Two case reports

MR. JAYAHAR BHARATHI

—Efficacy of the microbiological techniques in the evaluation of Nocardial endophthalmitis

DR. ANAND PARTHASARATHY

—Clinical presentations of Sturge-Weber syndrome

DR. DEEPA RAJESWARI

—Alport's syndrome: A study of 4 cases

DR. PRADEEP SINGH

—Fraser's syndrome

DR. RAVI PULLESWARA RAO

—*Comparative study of rigid PMMA IOL implantation through clear corneal phaco and scleral tunnel phaco*

DR. D. SHUKLA was the quizmaster of the quiz competition. Out of the six teams that participated, Aravind team won the competition.

Scientific group meeting on the prevention of blindness from Diabetes Mellitus - "Vision 2020" - The Right to Sight

(organised by WHO)

Geneva, September 14 – 16

Dr. P. Namperumalsamy chaired the scientific group comprised of participants from seven countries.

The purpose of this meeting was to develop the action plan for WHO technical support to member states in the prevention of blindness and visual impairment from diabetic retinopathy.



Dr. P. Namperumalsamy with participants of the scientific group meeting on the prevention of blindness from diabetes mellitus at Geneva

Workshop on Policy Implications of Childhood Blindness Survey

Dr. R. P. Centre for Ophthalmic Sciences, All India Institute of Medical Science, New Delhi, September 17 - 18

DR. P. VIJAYALAKSHMI and DR. PRAVEEN attended the workshop.

Inter-Country Expert Meeting on Education for Health Promotion

Hotel Germanus Days Inn, Madurai, September 25 - 28

DR. G. VENKATASWAMY, DR. LAKSHMI RAHAMATHULLAH and

MR. K. KALIYAPERUMAL attended the meeting to review the curriculum for health promotion courses. Twenty-one representatives from the Southeast Asian region attended the meeting.

Workshop on Bionomics of JE Vectors and Control

(organised by NAMP, Delhi in collaboration with the Centre for Research in Medical Entomology)

Hotel Pandian, Madurai, September 26

DR. G. VENKATASWAMY inaugurated the workshop and gave a talk on "Mission for Vision - Leadership issue"

Diabetes Association of India, Southern Chapter- DAICON 2001

Hotel Carlton, Kodaikanal, September 30

DR. G. NATCHIAR

— Ocular involvement in diabetes

Diabetic Education Meeting

(organised by Dr. Rajendran, diabetologist, R.V. Diabetes Specialities and Research Centre) Coimbatore, Oct 1-2

DR. P. NAMPERUMALSAMY

—*Prevention of blindness due to diabetic retinopathy*

Essilor Asia Pacific Convention

Phuket, Thailand, October 2-5

Mr. G. Srinivasan, Dr. Balakrishnan from AuroLab, Mrs. Kannamma Ravindran and Mrs. Saradha Ramakrishnan from Aravind Eye Hospitals attended the programme.

The XI Annual Meeting of Glaucoma Society of India

Indore, Madhya Pradesh, October 5 –7

DR. R. RAMAKRISHNAN

—*Structure of optic nerve head and pointers to an acquired glaucomatous cupping*

—*Neuroprotection in glaucoma*

DR. S. R. KRISHNADAS

—*The prevalence of glaucoma in India –*



Mr. G. Srinivasan, Mrs. Saradha Ramakrishnan, Mrs. Kannamma Ravindran and Dr. Balakrishnan at Phuket, Thailand

Conferences Attended Elsewhere

Findings of the Aravind comprehensive eye survey

—*The role of short wavelength automated perimetry in early diagnosis of glaucoma*

—*Xalatan – Worldwide experience*

DR. P. SATHYAN

—*IOP and visual outcome of phaco triple procedure in eyes with exfoliation glaucoma and cataract*

—*Glaucoma in keratoplasty*

Launch of Vision 2020 - The Right to Sight- A Workshop

Goa, October 10-13

A workshop was conducted to suggest policy recommendations for the National Eye Care Programme under the Vision 2020 framework. DR. G. VENKATASWAMY, DR. G. NATCHIAR and MR. R.D. THULASIRAJ represented Aravind Eye Care System.

Symposium on Business Management System as Applied to Health Care

(organised by Karnataka

Ophthalmological Society & Vittala

International Institute of Ophthalmology)

Bangalore, October 28

DR. R.D. RAVINDRAN

- *Medical audit*

Current Concepts in Medical Management of Glaucoma

(Symposium organised by Pharmacia

India Pvt. Ltd. and Trivandrum

Ophthalmic Club)

Trivandrum, November 4

DR. S. R. KRISHNADAS

—*Current Concepts in Medical Management of Glaucoma*

Seva Board Meeting

California, November 8-10

DR. G. NATCHIAR attended the meeting.

American Academy of Ophthalmology Annual Meeting

New Orleans, USA, November 10-14

DR. P. NAMPERUMALSAMY AND

DR. G. NATCHIAR attended the meeting.

DR. P. NAMPERUMALSAMY

—*Diabetic Retinopathy*

'Friends of Aravind' Meeting

The Annual Board Meeting of "Friends of Aravind" was held in New York.

Dr. Christine Melton, Dr. Carl Kupfer,

Prof. Fred Munson, Ms. Meg Leuker,

Dr. P. Namperumalsamy and

Dr. G. Natchiar participated.

33rd All Assam

Ophthalmological Society

Assam, November 10–11

DR. R. RAMAKRISHNAN

—*SICS in difficult situations*

—*Types of capsulotomy and nucleus prolapse*

—*Optic atrophy*

—*Field defects in visual pathway*

In addition, he performed live surgery.

Dr. R.D. Ravindran

I. *Symposium on Non phaco Small Incision Cataract Surgery*

—*Techniques of nucleus delivery*

—*Complication of SICS*

II. *Symposium on Neuro Ophthalmology*

—*Optic neuritis—recent trends in diagnosis and management*

—*Papilloedema-aetiopathogenesis diagnosis and management*

III. *Guest Lecture*

—*Prevention of postoperative endophthalmitis*

—*Manual phaco / Instrumental phaco*

—*Social Marketing*



Dr. G. Natchiar, Dr. Carl Kupfer, Dr. P. Namperumalsamy Ms. Meg Leuker, Prof. Fred Munson and Dr. Christine Melton at the Friends of Aravind meeting in New York

Seva Sight PAG Meeting

Vancouver, Canada, November 15-17
DR. G. NATCHIAR attended the meeting.

**Industry-Institute Partnership -
a practical approach for rural
institutions**

(organised by Arasan Ganesan
Polytechnic, Sivakasi.)
Nexus Computer Centre, Madurai,
November 29

MR. RAJAN

—*Modern techniques in networking
computers” using Aravind systems as an
example.*

PROF. V. SRINIVASAN

—*Computer-based instruments in eye care*
—*Training of polytechnic students in
managing computerised instruments.*

**East India Ophthalmic
Association conference**

Ranchi, November 30 to December 1

DR. NARENDRAN

—*Diabetic retinopathy management in the
communities*

DR. KALPANA NARENDRAN

—*SICS in paediatric cataract*
—*Phaco in difficult situations*
—*Debate on SICS vs Phaco*

**Kerala State Ophthalmic
Conference**

Cochin, November 30 to December 2

DR. KIM

*Simple Vitrectomy (Video Instruction
Course)*

— *Intra and postoperative complications
and management.*

DR. USHA KIM

—*Transconjunctival approach for ptosis
correction.*

DR. RANI MENON

— *Confrontation of quantity in cataract
surgery - The success story*

**Low Vision Awareness
Programme**

(in collaboration with Light House
International, sponsored by International
Eye Foundation)
United States Agency for International
Development,
L.V. Prasad Eye Institute, Hyderabad,
December 3-8

Medical officers Dr. K. Illango and
DR. THOMAS MATHEW , and refractionists
Mr. Muthu Ramalingam and
MRS. SUBBULAKSHMI attended this
programme.

**Intercountry Consultation
Meeting**

WHO/SEARO, New Delhi, December
11-14

DR. USHA KIM participated in human
resource development for Southeast Asian
region.

PUBLICATIONS

ARAVIND PUBLICATIONS

Quality Cataract Surgery Series

—*for high quality, large volume, sustainable cataract surgery programmes.*

CHIEF AUTHOR: DR. G. NATCHIAR

A set of seven modules explaining principles and techniques for developing high quality, large volume, sustainable cataract surgery programmes. Each module is based on the practices of Aravind Eye Hospitals in South India, with input from other successful programmes.

February 2001

Physiology of the Eye

DR. R. D. RAVINDRAN MS, DO

A concise text book for the postgraduate students in ophthalmology.

June 2001

JOURNALS

Kannoli

— *a Tamil monthly on eye care for the public*

Illumination

— *quarterly journal of the Aravind Eye Care System*

Aravind News

— *in-house bimonthly newsletter*

IN OTHER JOURNALS

British Journal of Ophthalmology

Vol: 85(2) Feb 2001

CUNNINGHAM, ET; RATHINAM, SR

— *TB or not TB? The perennial question, p. 127*

Journal of Tamil Nadu Ophthalmic Association

Vol: 42 (1) Mar 2001

SATHYAN, P; SHANMUGANATHAN, LV AND CHHAYA, SONAL G

— *Combined surgery phaco trab vs ECCE trab using mitomycin C as a primary procedure, p. 15-18*

Arch. of Ophthalmology

Vol: 199(3) Mar 2001

LOTERY, AJ; NAMPERUMALSAMY, P

— *Mutations in the CRBI gene cause leber congenital amaurosis, p. 415-423*

Cornea—The Journal of Cornea and External Diseases

Vol: 20 (2) Mar 2001

PRAJNA, N VENKATESH; GEORGE, CELIN; SELVARAJ, S; LU, KENNETH L;

MCDONNELL, PETER J and SRINIVASAN, M

— *Bacteriologic and clinical efficacy of Ofloxacin 0.3% vs Ciprofloxacin 0.3% ophthalmic solutions in the treatment of patients with culture-positive bacterial keratitis, p. 175*

MATHEN, MINU M; SEEMA, VISHNU;

PRAJNA, N VENKATESH; VIJAYALAKSHMI, P and SRINIVASAN, M

— *Congenital corneal anaesthesia: A series of four case reports, p. 194*

Community Eye Health

Vol: 14 (37), 2001

THULASIRAJ, RD AND SIVAKUMAR, AK

— *Cost Containment in Eye Care, p 4-6*

Journal of Tamil Nadu Ophthalmic Association

Vol: 42 (2) Jun 2001

SRINIVASAN, M

— *Acanthamoeba Keratitis, p.83-86*

Journal of Tamil Nadu Ophthalmic Association

Vol: 42(4) Dec 2001

GANGA, D; RAMALAKSHMI, G and

SRINIVASAN, V

— *Phacoemulsification systems – Care and maintenance, pp 179-180*

Ophthalmology

Vol: 108 (7) Jul 2001

RATHINAM, SR; FRITSCHKE, THOMAS R; SRINIVASAN, M; VIJAYALAKSHMI, P; READ, RUSSELL W; GAUTOM, ROMESH;

NAMPERUMALSAMY, P; RAO, NARSING A

— *An Outbreak of Trematode-induced Granulomas of the Conjunctiva, p.1223-1229*

Oph. Surgery And Lasers

Vol: 32 (6) 2001 Nov -dec

BALENT; CIVERCHIA, LINDA; NARENDRAN, KALPANA; PATEL; SUREKHA; KAR, SUMIT AND PATTERSON, DAVID A

— *High Volume Sutureless Intraocular Lens Surgery in a Rural Eye Camp in India, p. 446-455*

Lions Aravind Institute of Community Ophthalmology

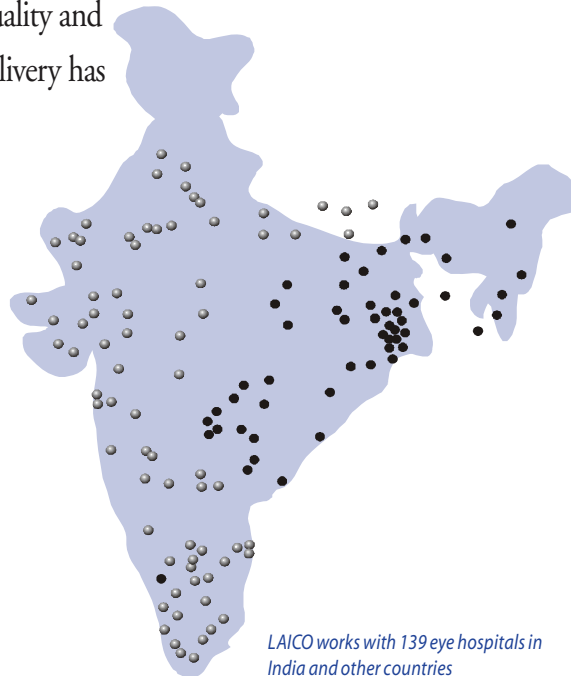
LAICO was founded in 1996 with the mission of contributing to the prevention and control of global blindness through teaching, training, consultancy and research in eye care delivery. Since its inception it has accomplished a great deal towards fulfilling that mission. LAICO's work makes it possible for Aravind to transfer the best of its expertise and experience to an ever-increasing number of eye care institutes across India and the rest of the developing world. Its global impact on the quality and efficiency of eye care delivery has been tremendous.

CONSULTANCY FOR CAPACITY BUILDING

Laico currently partners for capacity building with more than 130 eye hospitals located across India, Southeast Asia and Africa. It works in collaboration with INGOs like Lions International, SightSavers, CBM, IEF, WHO and Seva Foundation in order to achieve its goals.

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, Tamilnadu
22. KG Eye Hospital, Coimbatore, Tamilnadu
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
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
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, Nepal
48. Calcutta Lions Netra Niketan, Kolkatta, 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, Tamilnadu
63. Smt. Vallabhaneni Sitamahalakshmi Lions Eye Hospital, Vijayawada, Andhra Pradesh
64. Viramgam Sarvajanic Eye Hospital, Viramgam, Gujarat
65. Lion Chandulal Agarwal Memorial Eye Hospital, Manendragarh, Chattisgarh
66. Lions Club of Ajmer Eye Hospital, Ajmer, Rajasthan
67. Lions Eye Hospital, Lions Club of Mandawar, Rajasthan
68. Lions Eye Hospital, Krishnanagar, West Bengal
69. Abid Ali Khan Lions Eye Hospital, Hyderabad
70. Lions SightFirst Eye Clinic, Kitwe Central Hospital, Zambia
71. Jhargram Lions Eye Hospital, Midnapore, West Bengal
72. Lions Club of Galsi Welfare Trust, Burdwan Dt, West Bengal
73. Sone Bhadra Dehri Lions Eye Hospital, Tilothu, Bihar
74. Lions Jodhpur West Eye Hospital, Jodhpur, Rajasthan
75. Golcha Organisation, Biratnagar, Nepal
76. Lions SightFirst Eye Clinic, Gwanda, Zimbabwe
77. Haldia Lions Eye Health Care & Research Centre, Durgachak, West Bengal
78. Lions VUNM Eye Hospital, Vatva, Gujarat
79. Lions Eye Hospital, Rewa, Madhya Pradesh
80. Lions Club of Avadi Eye Hospital, Chennai, Tamilnadu
81. Mar Baselios Medical Mission Hospital, Kothamangalam, Kerala

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. Chattisgarh 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, Kolkatta, 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
24. Rotary Sansthan Seth Ratanchand Kanhaiyal Ranka Eye Hospital, Jaitaran, Rajasthan
25. Shree Bhairav Netra Yagna Samiti, Pali District, Rajasthan

26. Pali Sewa Mandal Eye Hospital, Pali-Marwar District, Rajasthan
27. Netra Jyoti Hospital (Barmer Jan Seva Samiti Managed), Barmer, Rajasthan
28. Dhamtari Christian Hospital, Chattisgarh, Madhya Pradesh

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, Tamilnadu
6. Good Samaritan Eye Hospital, Matrapalli, Tamilnadu
7. Kotagiri Medical Fellowship Hospital, Kotagiri, Tamilnadu
8. CSI Kalyani General Hospital, Chennai, Tamilnadu
9. Schieffelin Leprosy Research and Training Centre, Karigiri, Tamilnadu
10. Scudder Memorial Hospital, Ranipet, Tamilnadu
11. Lutheran Eye Hospital, Dharapuram, Tamilnadu
12. Vizhiyagam Eye Hospital, Sivagangai, Tamilnadu
13. Vision Eye Hospital, Hubli, Karnataka
14. Dr. Somervel Memorial CSI Mission, Karakonam, Kerala
15. Institute of Ophthalmology, Josephs Eye Hospital, Trichy, Tamilnadu
16. Medical Brother St. Johns Hospital, Kattappana, Idukki, Kerala

17. Leprosy Relief Rural Centre, Chettipatty, Salem, Tamilnadu
18. C.S.I. Campbell Hospital, Jammalamadugu, Andhra Pradesh
19. ALC Pakayanathan Memorial Eye Hospital, Chengam, Tamilnadu

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

IEF Supported Hospitals

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
3. Seethalakshmi Hospital, Gobichettipalayam, Tamilnadu

WORKSHOPS AND VISITS PROFILE - 2001

Workshops	No. of Workshops	Hospitals	Participants
Manpower and Management Development	2	11	49
Standardisation	1	5	13
Management and Planning Support for Establishing New Eye Hospitals	1	7	23

Needs Assessment and Follow-up Visits were made to 139 eye hospitals



Mr. R.D.Thulasiraj and Mr. Saravanan with the Administrative staff of the Lions Charitable Eye Hospital, Chittagong, Dhaka



Dr. P.Sathyan and Mr. A.K.Sivakumar with members of the Lions SightFirst Eye Hospital, Zimbabwe



Mr. Keerthi Pradhan and Dr. Jatin Shah with staff at the Lions Club of Ajmer at Rajasthan



Mr. A.K.Sivakumar, Mr. R.D.Thulasiraj and Dr. Kim with the hospital staff of the Cicendo Eye Hospital, Indonesia

WORKSHOPS AND SEMINARS

SF 741-Lions Manpower and Management Workshop

February 5-10

Twenty-one participants from the following five hospitals participated.

- Haldia Lions Eye Health Care and Research Centre, Haldia, West Bengal
- Lions Vatva U.N. Mehta Eye Hospital, Ahmedabad, Gujarat
- Rewa Lions Eye Hospital, Rewa, M.P.
- Dr. Lakshmipathy Lions Hospital, Lions Eye Care Centre and Research Foundation, Chennai, Tamilnadu
- Mar Baselios Medical Mission Hospital, Kothamangalam, Kerala

SF-741 Workshop on Lions Management and Planning Support for Establishing Effective Eye Hospitals

May 28 to June 2

Twenty-three participants from the following eight hospitals attended the workshop.

- Lions Chandulal Agarwal Memorial Hospital, Manendragarh, Raipur
- Lions Eye Hospital, Ajmer, Rajasthan
- Lions Club of Mandavar Eye Hospital, Dhausa, Rajasthan
- Lions Club of Krishnagar Hospital, WB
- Abid Ali Khan Lions Eye Hospital, AP
- Lions SightFirst Eye Clinic, Kitwe, Zambia

- Seethalakshmi Hospital, Gobichettyalayam, Tamilnadu
- HLG Memorial and Charitable Hospital Research Institute

Standardisation Workshop

August 6 – 11

This workshop focused on developing concepts relating to clinical and administrative activities. Fifteen participants from the following five hospitals attended the workshop.

- Pana Party Jaitaran Trust, Jaitaran District Pali, Rajasthan
- Shree Bhairav Netra Yagna Samiti, Bisalpur, Jawai Bandh, District Pali, Rajasthan
- Pali Seva Mandal Eye Hospital, Pali Marwad, Rajasthan
- Barmer Janseva Samiti, Station Road, Barmer, Rajasthan
- Dhamtari Christian Hospital, Dhamtari, Madhya Pradesh

SF-741 Lions Manpower and Management Development Workshop.

September 3- 8

The main objective of this workshop was to work with hospitals in capacity building to improve surgical output, quality, cost effectiveness, over all utilisation of resources and long-term financial sustainability.

Twenty-six participants from the following six hospitals attended the workshop.

- Lions Eye Hospital, Jhargram, West Bengal MD 322
- Lions Eye Hospital, Galsi, West Bengal MD 322
- Sonebhadra Dehri Lions Eye Hospital, Tilothu, Bihar MD 322
- Lions Jodhpur West Eye Hospital, Rajasthan MD 323
- Ram Lal Golchha Eye Hospital, Biratnagar, Nepal MD 325
- Lions SightFirst Eye Clinic, Gwanda Provincial Hospital, Zimbabwe MD 412



Participants of the Standardisation workshop with Dr. G. Venkataswamy, Dr. P. Namperumalsamy and other LAICO faculty

Seminar On SightFirst

(conducted for Lions Club International District 324B3)

September 23

The seminar on SightFirst was conducted to develop basic understanding of the eye care and community outreach programmes, that will help efficiently and effectively lead the SightFirst Programme in the District.

This seminar received an overwhelming response. More than 350 Lions members participated in the seminar.

DR. G. NATCHIAR

—Organising eye camps

DR. P. NAMPERUMALSAMY led the open session

DR. P. VIJAYALAKSHMI

—Eye care in childhood and school screening programme

DR. S.R. KRISHNADAS

—Common diseases of eye

DR. M. SRINIVASAN

—Eye donation

LN.DG.DR.ADHILAKSHMI GURUMURTHY

—Open discussion on eye donation

—Open discussion on school screening programme

LN.DG.DR.ADHILAKSHMI GURUMURTHY and MR.

R.MEENAKSHI SUNDARAM

—Open discussion on Eye/Diabetic Retinopathy camps

Seminar on Diabetes and Diabetic Retinopathy

October 7

To create awareness about diabetes and diabetic retinopathy, a seminar was organised by Lions Club International District 324 B3. More than 150 Lions members attended the seminar, and most underwent screening for diabetes.

The following papers were presented in the scientific session:

DR. P. NAMPERUMALSAMY

—Object and strategy of diabetic retinopathy

PROF.DR.ARTHURASIRVATHAM

—Diabetes and diet

DR. R. KIM

—Magnitude and management of diabetic retinopathy

DR. S.R. RATHINAM

—Social aspects of diabetes

MR. K. KALIYAPERUMAL

—KAP study findings on diabetic retinopathy

Workshop on Low Vision Aids

November 4

This workshop was conducted jointly by the visual rehabilitation department and the Integrated Education Implementation Committee. Mr. Shanmuga Sundaram, Joint Director for Rehabilitation for the Disabled, Govt. of Tamilnadu, was the chief guest. Ln. L. Shanmugam, Regional Coordinator, Lions Club, coordinated the workshop. Ninety-seven special teachers who teach low vision-students at school level, participated in the workshop.

Dr. P. Vijayalakshmi explained the clinical diseases causing low vision. Dr. Illango spoke on the school eye-screening programme, and Ms. Benitta talked about low-vision devices. Senior faculty members of the Integrated Education Implementation Committee gave an orientation about low vision in children.

Instruments Maintenance Camps in 2001

1. CSI Kalyani General Hospital, Chennai
2. Arasan Eye Hospital, Erode
3. Vizhiagam Eye Hospital, Salaigramam
4. M.N. Eye Hospital, Chennai



Participants of the Lions Manpower and Management Development workshop with Dr. G. Venkataswamy, Dr. P. Namperumalsamy and other LAICO faculty

TRAINING PROGRAMMES

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

LAICO – Aravind Eye Hospital, Madurai,
December 15, 2000 to January 13

A four-week community outreach course was held for the eighth batch of trainees. Participants were from the following hospitals:

- Lions Eye Hospital, Suryapet
- NRC Primary Eye Care Centre, Nepal
- Dr. Shroff's Charity Eye Hospital, New Delhi
- Mahatma Gandhi Eye Hospital, Antyodaya Chetana Mandal, Mayurbanj, Orissa
- Lions Eye Care Centre, Kathmandu, Nepal
- R. R. Lions Eye Hospital, Palakol, Andhra Pradesh
- J.P.M. Rotary Eye Hospital, Cuttack
- Sitapur Eye Hospital, Bahraich, Uttar Pradesh

Special course for Indonesian delegates

LAICO-Aravind Eye hospital, Madurai, March 15

Four regular instruments maintenance courses are conducted every year and special courses are conducted occasionally to meet the requirements of various organisations. Mr. Wawan and Mr. Martono from eye hospitals in Indonesia visited Aravind to attend a special instruments maintenance course.



Participants of the Ninth Community Outreach Course with Mr. R. Meenakshi Sundaram, Dr. CAK Shanmugham, Dr. G. Venkataswamy, Mr. Keerti Bhushan Pradhan and Mr. Rajendran

Orientation training for NGO representatives on diabetic retinopathy

LAICO, March 22

An orientation-training programme on diabetic retinopathy was conducted for NGO's representatives. Twenty-six representatives participated in the programme. Each NGO prepared a strategy and action plan for the project activities that were to be carried out in their project area.

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

LAICO, June 15

Ten participants from six different Indian states and also from Nepal and Africa attended this course. Participants were given exposure to the Aravind working model, the scientific approach in conducting camps through various field visits, lectures and group activities. They also learnt about Counselling, Primary Eye Care, Magnitude of Blindness and Social Marketing of Eye Care Services.

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

LAICO - Aravind Eye Hospital, June 15 to July 15

Ten participants from various hospitals attended the course.

- Christian Mission Hospital, Chhatarpur, Madya Pradesh.
- Lions Eye Hospital, Dharmavaram, Andhra Pradesh.
- Gram Vikas, Berhampur, Orissa.
- Shree Jalaram Eye Hospital, Baroda, Gujarat.
- Badmer Jan Sewa Samitee, Badmer, Rajasthan.
- Venus Eye Institute, New Delhi.
- Ophthalmic Mission Trust, Dahod, Gujarat.
- SEWA - Rural, Bharuch, Gujarat.
- Mechi Eye Care Centre, Birtamod, Nepal.
- Lions SightFirst Eye Hospital, Nairobi, Africa.

International Centre for Advancement of Rural Eye Care (ICARE)

Hyderabad, June 25-27

Mr. R.D. Thulasiraj visited the International Centre for Advancement of Rural Eye Care at the invitation to teach part of a six-month diploma course in Community Ophthalmology. Mr. R.D. Thulasiraj taught the students for three days covering the core areas in the 'Management of Eye Care Services'. During this trip he also met with Dr. G.N. Rao, Secretary General of IAPB and the IAPB staff to work out some of the details related to the forthcoming general assembly of IAPB at Hyderabad in October.

Curriculum Development Workshop for Training in Management in Eye Care Delivery

LAICO, July 30-Aug 2

The four-day curriculum development workshop was held as the initial part of the IAPB/WHO supported project for management training in eye care delivery. The main objective of it was to review the draft curriculum for:

- Management Training for Eye Care Programme Managers
- Management Training for Heads of Eye Hospitals
- Management Training & Systems Development for Hospital Administrators/Managers & Certificate Course in Eye Hospital Management
- Certificate Course for Clinical & Supervisory Skills Development in Ophthalmic Paramedical Personnel

A total of 13 participants representing International NGOs, eye care institutions, and the Governments of India, Nepal, Bangladesh and Indonesia attended the workshop. They included resource persons Ms. Beula Vincent and Ms. Gunawathy Fernandes, Christoffel Blinden Mission, Bangalore; Prof. Chandrasekar Shetty, Vice Chancellor, Rajiv Gandhi University of Health Sciences, Bangalore; Dr. Farida Sirlan, Ministry of Health, Jakarta; Dr. G.N. Rao, L.V. Prasad Eye Institute, Hyderabad; Dr. Mrs. Jose, Deputy Director General, Ophthalmology section, New Delhi; Dr. Jatin Shah, Technical Advisor MD323, Mumbai; Dr. Rajkumar, Country Director, Orbis International, New Delhi; Prof. Rabiul Hussain, Managing Trustee, Chittagong Eye Infirmary & Training Complex, Bangladesh; Prof. Sushil Kanna, IIM, Kolkatta, West Bengal; Mr. Phillip T. Albano, Lions Clubs International Foundation, Illinois, USA; Dr. G.P. Pokhrel, Kathmandu, Nepal; Dr. Pararajasegaram, Consultant, Prevention of Blindness and Deafness, World Health Organization, Geneva. The purpose of the workshop was to ensure that the training content met the management needs of eye care personnel.

Indonesian team

A four-member team comprised of Dr. Rachmi Untoro, Director, Ministry of Health, Jakarta, Dr. Vidyapati Mangunkusumo, Teaching residents, Prof. Sugana Tjakrasudjatma, and Dr. Nila Moeloek, Medical faculty, University of Indonesia visited Aravind Eye Hospital,



Participants of the Curriculum Development Workshop



Dr. G. Venkataswamy and Ms. Sasipriya with Indonesian team members

Madurai. Their main focus at Aravind was to learn about effective community outreach strategies, performing high volume surgery, and delivering quality eye care.

Management Training and Systems Development for Hospital Administrators/Managers

LAICO, November 1-30

This one-month course was organised by Mr. A.K. Sivakumar. It was conducted for the fourth time at LAICO. Nine participants from different hospitals attended the workshop.

- University Eye Clinic of Albania, University Hospital Centre “Mother Teresa”, Tirana, Albania.
- Lions Eye Hospital, Karimnagar, Andhra Pradesh
- Padar Hospital, Betul District, Madhya Pradesh
- Eye Services, Bafoussam, Cameroon
- Mechi Eye Care Center (MECC), Birtamod, Nepal
- BP Koirala Lions Center for Ophthalmic Studies, Kathmandu, Nepal
- Trashigang Hospital, Bhutan
- Sap-Sun Htun Hospital, Yangon, Myanmar
- Prevention and Tropical Medicine, Institute of Medicine, Yangon, Myanmar

Four of the nine participants were nominated by WHO under IAPB management course project.



Participants of the Management Training and Systems Development for Hospital Administrators Course with Mr. R.D. Thulasiraj and LAICO faculty

The Refresher-Training Programme for Vehicle Drivers

LAICO, November 11

A one-day refresher-training programme was conducted for Aravind vehicle drivers. The session stressed the need for discipline and utmost care while driving. Prof. V. Srinivasan discussed the importance of various aspects of vehicle maintenance. Dr. S. Aravind emphasised on some aspects of duties and responsibilities of drivers. Dr. Ilango presented a slide show and talked about various eye diseases and explained some first aid procedures in case of vehicle accidents. He used volunteers from the audience to demonstrate Cardio Pulmonary Resuscitation. Mr. Sengutuvan and Mr. Soundararajan, Assistant Commissioners of Police explained the traffic rules and regulations. Mr. Satyanarayanan, Motor Vehicle Inspector spoke on accident prevention and steps being taken by the department to establish accident trauma centres on highways. Mr. Balasubramanian of Kalyani Auto Service and Mr. Kubendra Babu of ABT spoke on maintenance of vehicles. Mr. A.K. Sivakumar, Faculty, LAICO spoke on customer satisfaction.



Mr. S.G. Ramanathan at the Refresher-Training Programme for Vehicle Drivers

PROJECT STUDENTS

from University of Michigan

The first team - Mr. Todd Bottger, Ms Dana Dor'e, Mr Jason Hekl, and Ms. Nida Shamsy, and two supporting faculty members from the University of Michigan Business School came to Aravind to develop a conceptual framework for Aravind Eye Care System's internet strategy and to outline specific applications within that framework targeted to courses offered by LAICO.

The project of the second team- Jeffrey Lieberman, Andrea Shellman and Mona Tekchandani was to create an organisational restructuring plan that would allow the Aravind Eye Care System to prepare for growth, empower the units and develop innovation, while maintaining its culture and values. One potential area identified for restructuring was decentralisation of certain activities and processes from Aravind-Madurai to the other Aravind Eye Hospitals at Theni, Tirunelveli and Coimbatore. The William Davidson Institute sponsored both the projects.

OTHER VISITS BY LAICO STAFF

Strengthening Eye Care Services in Uttar Pradesh

Mr. Keerti Pradhan, Faculty-LAICO and Ms. Dechen Tsering, Program Manager, Seva Foundation, USA met Mr. K. K. Sinha, Health Secretary of Uttar Pradesh on February 1. They discussed the forthcoming workshop in Uttar Pradesh on strengthening eye care services through NGOs and private eye care organisations. Mr. K. K. Sinha expressed willingness to take ideas from this workshop forward to initiate a change in the UP eye care work.

He suggested including some private eye care organisations at the workshop to be held from April 16-18 at Lucknow.

Training at Center for Disease Control (CDC), Atlanta, USA

Mr. Keerti Bhusan Pradhan, Faculty, LAICO-Aravind Eye Care System attended the 6-week course on Management of International Public Health Training at Atlanta, USA, from 10th September to 20th October. The training was conducted by the CDC under its Sustainable Management Development Program (SMDP).

The programme's goal was to create and develop management-training capacity in health at the country level.

SMDP aims to improve the effectiveness of public health programmes by strengthening management capacity in the developing world. He also visited the SEVA office at Berkeley where he made a presentation about his training and its effectiveness. He met with several consultants including Mrs. Neelam Sekhri Feachem, Beth Trudell, Director of Training and Education at Kaiser Permanente (KP) International, Debra Mipos-Director Physician Training and Development at KP, and Marlon Maus of Wills Eye Hospital. Plans are being made for some of those consultants to visit LAICO in the coming months to share their expertise in training and development. Mr. Keerti also met with Sandra Dratler, Faculty at the School of Public Health, University of California, Berkeley to discuss the possibility of a mutual exchange programme with LAICO for Faculty Exchange and Development.



Nida Shamsy, Jason Hekl, Dana Dor'e, Todd Bottger from University of Michigan



Mr. Keerti Pradhan involved in group assignment with the co-participants of the training course at Atlanta, USA

**Training in Health Services Management,
London School of Hygiene and Tropical Medicine,
London**

Mr. Muralikrishnan was in the UK for one year to complete his masters in Health Services Management under the department of Public Health and Policy at the London School of Hygiene and Tropical Medicine, University of London. He got trained in epidemiology, health policy, health economics, social research, health care evaluation, health services, organisational and financial management. During his stay he underwent specialised training in advanced health economics as an intercollegiate student at the London School of Economics and Political Sciences. He also visited the International Centre for Eye Health, University of London.

**Spoken English Class for Housekeeping and
Catering Staff**

Prof. V. Srinivasan taught spoken English to the housekeeping and catering staff so as to communicate more effectively with staff and visitors to the hospital.

A Short Course in Biostatistics at CMC, Vellore

Mr. Karthik Prakash attended a 6-day course on Multiple linear Regression and principles of Epidemiology from July 16–21. Ms. Padmawathi attended 6-day course on Logistic Regression from July 23-28.

**DEVELOPMENT WORKSHOPS FOR LAICO AND
ARAVIND STAFF**

**Refresher Training for Counsellors and
Receptionists**

Aravind Eye Hospital, Madurai, October 24 - November 7

About 37 counsellors and 38 receptionists participated in this workshop, organised by Ms. Deepa and Ms. Rajameenakshi. The workshop focused on some of the frequent problems occurring in the counselling and medical records department. Non-clinical sessions were handled through role-play, group work, games, situational analysis, and discussions.



Mr. Muralikrishnan with Prof. Gorden at ICEH, London



Prof. Srinivasan conducting spoken english classes for housekeeping staff

Aravind Centre for Women, Children and Community Health (ACWCCH)

The Centre's major focus is preventive health care through community oriented health education projects. Its services include prenatal and postnatal care and childhood immunisations. ACWCCH has conducted several research projects to study the effects of Vitamin A in the child's health.

Nutrition Network Meeting

LAICO, April 28

A nutrition network meeting was conducted to plan activities for the nutrition network week in September. The key members included Dr. Rajammal Devadoss, Chairman of Nutrition Network Committee of Tamilnadu; Dr. Vijaya Srinivasan, Director, Gandhigram Institute of Rural Health and Dr. S. Elango, Deputy Director of Health Service, Dindigul. Dr. Lakshmi Rahamathullah spoke on nutrition needs, the attention of every citizen of India.

Following the nutrition network meeting a press meet was held to address the nutritional movement and create awareness among the community.

Dr. G. Venkataswamy while addressing the press members, introduced the new health education project that is to be started in the Virudhunagar district. This project aims to maximise utilisation of existing resources in the field of health and nutrition, and also equip the local leaders for a sustainable programme.

Nutrition Fun Fair 2001

On September 6th, Aravind Centre for Women, Children and Community Health celebrated World Nutrition Week by organising a funfair at Kariapatty. Aiming to bring about behavioural changes in the community through adopting better health nutritional practices, the fair focused on major nutritional deficiencies like anaemia and Vitamin A deficiency. Street plays, puppet shows, villupattu, games and songs were used to disseminate health and nutritional messages. All those who came to the fair had the opportunity to check their height and weight and measure their haemoglobin level. There were several posters put up that depicted various nutritional problems and ways of overcoming them. There were also demonstrations on how to prepare nutritional snacks at affordable cost with cereals and grains available in the village.

STATISTICS—2001

Out-patient visits	14,035
Children below 5 years	1,320
Adult cases seen	665
Antenatal cases seen	13

Immunisation

DPT	453
OPV	566
AMV & MMR	186

Vitamin A Deficiency cases seen

XN & X ₁ b	14
Keratomalacia	12



At the Nutrition Fun Fair

Research

ACWCCH is currently working on improving child health through Health Education Project. The project aims to assess the impact of health education on health behaviour in Kariapatty Block of Virudhunagar district.

The Vitamin A Supplementation In Newborns (VASIN) Study was completed in 2001. The study was conducted to determine whether Vitamin A supplementation in newborns within 48 hours after delivery reduces infant mortality, morbidity and improves growth in newborns. The study was successfully completed with more than 90% follow up rate at 6 months and 10,341 children were discharged from the study.

Dr. Lakshmi Rahamathullah and Ms. Sheela Devi attended the XX International Vitamin A Consultative Group (IVACG) International Nutrition Anaemia Consultative Group (INACG) meeting in Hanoi, Vietnam. There they also met with a group from Hellen Keller International (HKI) to explore the possibilities of establishing a collaboration. They discussed the development of the country study and multi-country study on treatment strategies for severe anaemia in pregnant women and children, with the team from John Hopkins University. They also met Dr. Barbara Underwood and Mr. Nandi, Food and Agricultural Organisation (FAO) and members from other international organisations such as UNICEF.



Dr. Lakshmi Rahamathullah and the ACWCCH team meeting the community health workers at Kariyapatty

Research Projects

The large volume of patients, extensive community participation, and access to a large network of eye hospitals makes Aravind Eye Care System ideal for conducting clinical, population based studies, and social and health systems research. Aravind Medical Research Foundation coordinates the needs of all research activities.

Molecular Genetics of Hereditary Glaucoma

Investigators : Dr. S.R. Krishnadas
Dr. P. Sundaresan
Collaborators : University of IOWA, USA
Aravind Eye Hospital, Madurai.
Duration : 2001–2005
Objective : To identify the Candidate Genes for Congenital Glaucoma in Indian Population.

DR. P. SUNDARESAN visited the Department of Molecular Ophthalmology at the University of IOWA, USA in May and had discussions with Dr. Edwin Stone and Dr. Andrew Lotery about this ongoing research project and genetically analysed the primary and juvenile open angle glaucoma samples from the South Indian population.

Molecular Genetics of Juvenile Onset Primary Open Angle Glaucoma

Investigators : Dr. P. Sundaresan
Dr. S.R. Krishnadas
Duration : 2001–2005
Objective : To screen families for JOAG mutations to help identify individuals at high risk for this form of glaucoma before significant vision loss.

Among the various types of glaucoma, Juvenile Open Angle Glaucoma (JOAG) and adult onset Primary Open Angle Glaucoma (POAG) are relatively common causes of blindness in India. JOAG is inherited in an autosomal dominant mode and associated with elevated intraocular pressure. Twenty nine individuals were screened for mutations. Among them 14 patients clinically identified as JOAG and 15 controls (proband family members). All the three exons were analysed using 11 primers. One known mutation (Tyr347Tyr) was identified in one family and one novel mutation in another family in exon 3C. This novel mutation (Ala363Val) in exon 3C may also be responsible for JOAG.

Genetics and structural analysis of Myocilin protein involved in Juvenile Onset Primary Open Angle Glaucoma

Investigators : Dr. P. Sundaresan
Dr. S. Krishnaswamy
Dr. S.R. Krishnadas
Collaborators : Madurai Kamaraj University, Madurai
Duration : 2001-2005
Objective : To determine the presence of myocilin and to measure its level in aqueous humor.

Aqueous Humor (AH) was analysed for the presence of myocilin in glaucomatous

patients (15) and in cataract controls (13). The protein profile was analysed by using SDS-PAGE. Myocilin was found to be present in AH of 13 glaucomatous patients (87%) with apparent molecular size of 140 or 160 KDa, which was not seen in any of the cataract patients. These protein bands were evenly visible at all ages in POAG patients. It appears that the level of myocilin is elevated in the AH of POAG patients and that it may exist in complex form or in aggregation with some other protein. This finding will lead to determine the types of mutations in GLC1A locus and the changes in structure - function relationship of myocilin protein.

Aetiology and pathogenic mechanism of Leptospirosis uveitis

Investigators (India) : Dr. VR. Muthukkaruppan,
Dr. S. R. Rathinam
(Netherlands) : Dr. Rudy Hartskeerl,
Professor J.S Stilma(MD),
Dept of Ophthalmology, Royal Tropical
Institute for Leptospirosis, Netherlands.
Funded by : University Medical Centre, Utrecht.
Duration : 2001–2003
Objective : To determine the leptospiral aetiology
and pathogenic mechanism of uveitis.

Leptospirosis is a widespread zoonotic disease that affects virtually all mammals in different parts of the world. In humans, several months after recovery from acute illness, a small proportion of patients develop uveitis, which is characterised by certain clinical features. Immunological studies as well as PCR and bacterial isolation in aqueous humor were carried out. On the basis of silver staining for LPS, absorption studies and proteinase-K or periodate treatment, the supernatant antigen was identified as LPS. Thus demonstrating the importance of LPS antigen for the diagnosis and for studies on aetiopathogenesis of Lepto-uveitis.

A total of 81 patients with clinical criteria of leptospiral uveitis, 15 cataract controls and 15 non-lepto-uveitis were studied for serum IgM and IgG antibody levels by Microscopic Agglutination Test (MAT) and Enzyme-Linked Immunosorbant Assay (ELISA) to Lipopolysaccharide antigen purified from Leptospire. Sera from acute leptospirosis patients and healthy volunteers were used as positive and negative controls respectively. Further, aqueous humor samples from 35 lepto-uveitis patients and 15 cataract controls were analysed. On the basis of IgM response to lepto-LPS, 48% of lepto-uveitis patients were significantly positive (Mean OD \pm SE: 0.22 \pm 0.03) in contrast to cataract controls (0.052 \pm 0.006). Non-lepto uveitis patients were negative for this antibody response. The difference in IgG response between patients and controls is not impressive to provide the serological confirmation of lepto-uveitis. 58% of lepto-uveitis patients and none of the controls were positive for MAT. When both test positivity is considered together, 77% are significantly positive for leptospiral antibodies in their serum. To confirm the aetiology of uveitis, it is required to detect leptospiral DNA in aqueous humor by Polymerase Chain Reaction (PCR). (82%) of suspected uveitis patients were positive in PCR for G1/G2 primers. None of the controls were positive for both primers. Serological analysis (Microscopic Agglutination Test) identified only nine suspected lepto uveitis cases (52%). The present study demonstrates the leptospiral aetiology of uveitis.



Dr. Rudy Hartskeerl giving a seminar on Leptospirosis

Newly recognised presumed Trematode induced ocular inflammation in children

Investigators	: Dr. S.R. Rathinam Dr. Usha Kim Dr. N.A. Rao
Collaborators	: Dr. N.A. Rao, Dohney Eye Institute, Los Angeles, USA
Duration	: 1997-2001
Objective	: To identify the etiology of a paediatric granulomatous eye disease.

Etiological distribution of uveitis in children is known to be unique and different from that of adult population. The magnitude and the causes also depend upon geographic, ethnic and environmental factors. Clinical analysis was done on 588 case records of uveitis patients aged 16 years and below examined at Aravind Eye Hospital, India between 1996-2000. The children underwent systemic evaluation, tailored laboratory investigations and biopsy and/or anterior chamber tap for histologic examination. One-third of paediatric uveitis patients presented with solitary anterior chamber granuloma. They showed evidence either in clinical or histopathological study towards a trematode or Splendore-Hoeppli phenomenon. Unlike the previous reports a newly recognised water-borne Trematode ocular infection appears to be a common cause of uveitis in South India and appropriate public health measures are required for prevention.

Childhood Cataract Outcome Study

Principal Investigator	: Dr. P. Vijayalakshmi.
Co-Investigator	: Dr. Michael Eckstein, International Centre for Eye Health, London
Project Co-ordinator	: Mrs. 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. The eighth year follow-up is underway.

Congenital Rubella Syndrome (CRS) Study (ICEH)

Principal Investigator	: Dr. P.Vijayalakshmi
Co-Investigator	: Dr. Clare Gilbert, International Centre for Eye Health(ICEH), London.
Project Co-ordinator	: Mrs. B.Poornima
Funded by	: NERC, a charity based in Bristol.
Duration	: September 2000-February 2001
Objective	: To study the impact of CRS on various systems in the body and its effect on the quality of life in children and to determine the strain of the virus prevalent in India.

Totally 74 cases that were both clinically suspected and confirmed by laboratory investigation were identified from our old case records and brought to the hospital with the help of field workers. Samples were taken of throat swab, blood, saliva and urine samples from already proven cases (laboratory confirmed) and the strain to be identified through viral culture by Dr. David Brown, Director, Enteric and Respiratory Virus Laboratory, London. This is an ongoing study.

Diabetic Retinopathy Management in the Community: A Pilot Project

Funded by	: Lions Clubs International Foundation
Project area	: Aravind Eye Hospitals, Madurai, Theni and Coimbatore
Duration	: 2000-2004
Objective	: To prevent and reduce blindness resulting from Diabetes mellitus by creating awareness in the community, organising screening camps and developing a service delivery model for diabetic retinopathy patients.

Intervention Programme:

Awareness Creation

During the year 2001, six seminars were conducted for the primary health centres and corporation medical officers,

ophthalmologists and for the general medical practitioners in the project districts. 105 medical practitioners attended the seminar and symposium. 38 health education training was conducted for the primary health centres staff, corporation health staff, health related sectors staff like ICDS, TINP and also for NGO's staff. 2,664 participants were benefited by the health education training. Over forty guest lectures on diabetes and diabetic retinopathy have been conducted during the year. The participants were Lions club members, bank staffs, college professors, industrial workers, school teachers, telecommunication staff, self-help group, NSS students, Rotarians and community.

Community Outreach

Fifty six diabetic retinopathy-screening camps were conducted during this period. 6,387 diabetics were identified out of 23,353 persons screened. Of this number 1,248 were diabetic retinopathy patients.

Tertiary Care

One thousand and sixty seven diabetic retinopathy patients from the project area were treated with laser photocoagulation during this year.

Training

Thirty six ophthalmologists from all over the country received training in laser photocoagulation to manage diabetic retinopathy in the comm-unity. A one-day comprehensive

training was given to 136 medical practitioners to diagnose and manage diabetic retinopathy.

KAP Study

KAP survey data was analysed and the report was prepared.

Molecular Genetics of Congenital Cataracts in Man and Mouse

- Investigators : Dr. P. Vijayalakshmi,
Dr. S.T. Santhiya,
Basic Medical Science, Taramani,
Chennai
- Collaborators : Dr. Jochen Graw, Laboratory of
Molecular eye development, Inst. fur
saugetie genetik, Germany,
Prof. I. Hansmann, Inst. fur
Humangenetik und Medicinzische
Biologie, Martin Luther-Universitat,
Germany.
- Duration : 1995 - ongoing
- Objective : To understand the molecular and genetic
basis of congenital cataract.

Three families where multiple members having congenital cataracts were identified. DNA was extracted from blood samples provided by the probands, their parents and other available family members. The coding and flanking regions of gA-gD-crystallin encoding genes (CRYGA-GRYGD) were amplified by PCR from



Dr. P. Namperumalsamy giving an orientation on Diabetic Retinopathy for General Medical Practitioners.



Mr. K. Kaliyaperumal explaining the growing magnitude of diabetic retinopathy to the Mahatma Gandhi Ashram staff

Research Projects

genomic DNA and sequenced. In three families, two missense mutations and one nonsense mutation in coding regions of a CRYG gene were found to co-segregate with the phenotype. Several interesting polymorphic sites in CRYG genes are documented in subjects of Indian origin. This study further confirms the CRYG gene cluster as a major locus in cataractogenesis in humans.

Improving Child Health through Health Education Project

Investigator : Dr. Lakshmi Rahamathullah
Collaborators : SEVA Foundation
Aravind Centre for Women, Children & Community Health
Project Manager : Ms. S. Sheela Devi
Duration : 2001 - 2003
Objective : To assess the impact of health education on health behavior in Kariapatty Block of Virudhunagar district.

The study aims to reduce Grade III malnutrition among children aged 3 years and below from 7% to 4% and to reduce the low birth weight percentage from 33 to 28 in the area. It also seeks to create awareness among the community to maximise the utilisation of existing health and nutritional services offered by both government and other non-governmental agencies in the area. A local advisory committee has been set up by representatives from government, NGOs, elected leaders and representatives from the community to plan and implement the project.



Dr. P. Namperumalsamy, Dr. M. Srinivasan, Dr. S.R. Rathinam and Ms. Brindha Priyadarshini with other participants at the Proctor Foundation, San Francisco, USA

Vitamin A Supplementation in Newborns (VASIN) Study

Investigators : Dr. Lakshmi Rahamathullah;
Dr. James Tielsch
Co-Investigators : Dr. Joanne Katz;
Mr. R.D. Thulasiraj
Collaborators : Johns Hopkins University, Baltimore, USA
Aravind Centre for Women, Children & Community Health
Project Manager : Ms. S. Sheela Devi
Duration : 1998-2001
Objective : To determine whether Vitamin A supplementation in newborns within 48 hours after delivery reduces infant mortality, morbidity and improves growth in newborns.

The study was conducted in Natham and Kariapatty blocks in South Tamilnadu. 14,035 pregnancies were enrolled and 11,619 newborns were administered the dose. The study was successfully completed with more than 90% follow up rate at 6 months and 10,341 children were discharged from the study. The study showed a significant reduction in 6 months mortality by 22% among the Vitamin A group and there was no impact on morbidities and growth parameters on Vitamin A supplementation.

Role of Antioxidants in Cataract Prevention

Investigators : Dr. David Gritz;
Dr. M. Srinivasan
Collaborators : Francis. I Proctor Foundation, USA;
Aravind Eye Hospital, Madurai
Project Manager : Ms. R. Brinda Priyadarshini
Duration : 1998-2003
Objective : To determine the potential of oral Antioxidant supplementation in retarding the progression of cataract in South India as measured by the clinical appearance of the lens using LOCS III method and to determine the epidemiological factors which influence

the progression of cataracts in South India in the control sample.

Study Status

The above-mentioned study has been going on for four years, and no changes have been made to the protocol. Enrollment is closed; After the II DSMC meeting in March 2001, at San Francisco, it was decided to extend the study period till 2003. The study remains ongoing and is expected to continue for 1 more year. To date, there have been no adverse events that required any subject to drop from the study.

Palghat Blindness Survey

Collaborators : Ministry of Health, New Delhi; Aravind Eye Hospital, Coimbatore and LAICO.
 Duration : December 2000 to May 2001
 Objective : To carry out a blindness survey in Palghat districts in Kerala.

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

Co-Investigators : Mr. R.D. Thulasiraj
 Project Coordinators : Mrs. Preethi Pradhan
 Mr. V. Vijayakumar
 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.
 Funded by : Special budget released by the US Embassy
 Objective : To develop and test Visual Function and Quality of life assessment for use in the Indian context.

HEALTH ECONOMIC RESEARCH

Impact of Uncorrected Vision — A study

A group of UK researchers are collaborating with LAICO and Aravind Eye Hospitals to conduct a research study in Health Economics-Impact of Uncorrected Vision on Productivity. This study was funded by DFID-UKs Knowledge and Research Programme and carried out by the collaborative effort of Adaptive Eye Care Limited, UK; GIC Ltd, UK and Economists Advisory Group, UK. During the first phase Mr. James McLeod, GIC Ltd. was at Aravind from February 6-11, 2001 to initiate the research process, which concluded in May 2001. Dr. George Puthuran, Medical Officer, Aravind Eye Hospital; Mr. Keerti Pradhan, Faculty, LAICO and Mr. James, UK visited the Madura Coats factory and met with the top management to get their approval and briefed them about the study and its benefits. After understanding the process in detail a questionnaire for collecting the data on productivity in relation to the target sample workers was developed.

A sample of 238 workers of Madura Coats from these spinning and winding sections were taken for the study. Their current vision and productivity over the past four weeks were screened. Then all the workers were examined and given spectacles if indicated. After three months gap the productivity data was again collected to see whether there is any improvement in the productivity after the vision correction. Qualitative assessment was also made. Overall increase in productivity was estimated at 10% and the workers reported better quality of life.

NEW PROJECTS INITIATED

Studies on the Genetics of Inherited Aniridia in Indian Population

Investigators : Dr. P. Sundaresan
 Dr. P. Vijayalakshmi
 Dr. S.R. Krishnadas
 Funded by : Indian Council of Medical Research
 Duration : 2002-2005
 Objective : To screen for mutations in PAX6 gene of autosomal dominant isolated aniridia patients.

Research Projects

Aniridia is a congenital anomaly with incomplete formation of iris and associated with glaucoma, cataract, nystagmus, foveal hypoplasia and peripheral corneal degeneration with suboptimal vision. It is caused by mutations in the PAX6 gene. PAX6 gene has 13 exons and 12 introns in human chromosome number 11p13. This study found that exon 4 and exon 5 of PAX6 gene shows mutation in the probands of two families. The pedigree of these families with aniridia showed the autosomal dominant inheritance, supporting the results.

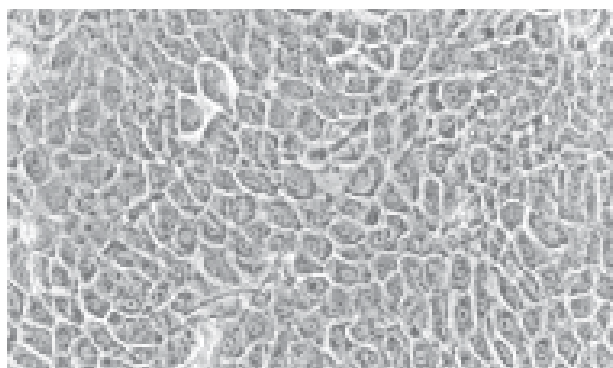
Corneal Epithelial Stem Cells for Clinical and Toxicological applications

Investigators : Dr. VR. Muthukkaruppan
Dr. N.V. Prajna
Dr. M. Srinivasan

Duration : 2002-2005

Objective : To generate corneal epithelial stem cells for clinical and toxicological applications using tissue engineering techniques.

Standard corneal transplantation fails to treat several ocular surface disorders, including loss or malfunction of stem cells. Hence, in vitro culturing of corneal epithelial stem cells from cadaver limbal rings becomes essential. Each piece of the limbal explant was placed in a tissue culture dish with its epithelial side up and cultured at 37°C in 5% CO₂ for three weeks. The picture (Fig: 2) shows well-differentiated confluent living culture of corneal epithelium which needs to be engineered to form a tissue for transplantation. On the basis of viability and outgrowth of



Differentiated living culture of corneal epithelium

epithelial cells, the utility of cadaver limbal ring for the generation of corneal epithelium is well indicated.

Prevention of Traumatic Corneal Ulcer: A Multicenter intervention project in South East Asia

Investigators : Dr. M. Srinivasan
Collaborators : WHO
Duration : 1 year from the start of the study
Objective : A population based prospective study designed to address the following aims

1. To determine the effectiveness of different mechanisms existing in the prevailing health care systems of South East Asia for delivery of prophylactic treatment to prevent corneal ulcers following abrasions of the cornea
2. To determine the role and ideal method for prophylaxis in regions that have a high incidence of fungal corneal ulcers

OTHER PROJECTS INITIATED:

1. Studies on the proangiogenic cytokines in Eales' disease and Proliferative Diabetic Retinopathy
2. Studies on the Genetics of Age-related Cataract in Southern India. Dr. Nathan Gongdon, Dr. N. Praveen, Dr. Mohan Rao
3. Propagation of Human Corneal Endothelial cells for Toxicological and Clinical Applications. Dr. VR. Muthukkaruppan, Dr. N.V. Prajna, Dr. M. Srinivasan
4. Project on Congenital Rubella Syndrome
 - I Major Study—Population based surveillance for Congenital Rubella Syndrome (CRS) in South India
Principal Investigator : Dr. P. Vijayalakshmi.
Co-Investigator : Dr. Lalitha Prajna
Administrator : Dr. S. Aravind.
 - II Additional Studies
 - 1) CRS case investigation: 0-11 months
 - 2) CRS case investigation: 12-59 months
 - 3) Sero Survey of Rubella antibodies in female health workers at Aravind Eye Hospital between 18 to 40 years of age.

Aurolab

Aurolab, the manufacturing division of Aravind Eye Care System, has made significant progress during its ten years of operation. It was started in 1992 as a non-profit charitable trust, with the mission of supplying high quality ophthalmic products at prices affordable to common man in the developing countries.

Since its inception a decade ago, 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 and Al-Noor Foundation, Saudi Arabia. Aurolab's products are supplied primarily to non-profit eye care programmes at affordable prices.

Aurolab continued its focus on lowering the cost of ophthalmic surgery by developing new ophthalmic medical products not readily available at affordable prices. Aurolab successfully completed the in-house development and initiated the marketing of many new products. The major new products introduced include hydrophilic foldable lenses, capsular tension rings, taper point and reverse cutting suture needles, econazole, trypan blue, perfluro octane and clotrimazole pharmaceuticals and scratch resistant coated spectacle lenses.

Aurolab constantly interacts with its customers to identify areas of improvement in existing products and to identify new product needs. Many improvement projects have been carried out using a focused team approach to improve quality and reduce production costs.

Based on the importance of marketing efforts to make the full range of Aurolab products available and accessible to a wide range of customers, new marketing and sales initiatives were implemented by recruiting additional personnel and the creation of web based marketing tools.



The Aurolab Team

INTRAOCCULAR LENS DIVISION

Aurolab IOL division continues to play its role as a reliable supplier of affordable high quality single piece and three-piece PMMA lenses. During its ten years of operation around 3 million Aurolab lenses have been delivered primarily to non-profit users, in more than 90 countries around the world.

Based on the market demand for foldable lenses, Aurolab evaluated the feasibility of producing these lenses. The materials and processing know-how of silicone and hydrophobic foldable lenses were found to be proprietary in nature and difficult to obtain. Since a range of hydrophilic foldable lens materials were readily available and the safety and efficacy of these lenses were well proven by a large number of European users, Aurolab initiated a program for in-house development of hydrophilic foldable lenses using existing production equipment. Production processes and a packaging system for single piece hydrophilic foldable lenses were developed and introduced in the market after careful clinical trials.

The IOL division also added another new product, Capsular Tension Ring (CTR), to its product range. This circular ring made from the same PMMA material as the IOL is a useful aid for avoiding postoperative complications in patients whose capsular bag support for the lens is not normal. Aurolab produced an educational compact disc (CD) of this surgical procedure in association with Aravind Eye Hospital for better promotion and acceptance of this new product.

A state-of-the-art automated lens measuring system was added to provide the needed capability for quality control of PMMA and foldable lenses as per recent international standards.

A new blister packaging system was developed to provide additional packaging options and also to lower packaging cost. Efforts were initiated to produce heparin coated and negative power lenses to meet the special needs of surgeons.

SUTURE NEEDLE DIVISION

The suture needle division developed new needles with taper point and reverse cutting point geometries in various wire diameter sizes ranging from 100 to 230 microns. The primary aim of this development was to produce needles suitable for use in cardiovascular surgeries as a diversification of the product range. A range of taper point needles with polypropylene sutures were made and supplied to surgeons for trials. Further testing and validation of these sutures is under progress.

Aurolab has produced and supplied more than 1.5 million ophthalmic needles so far and these suture needles have been well accepted by users. The production and sale of ophthalmic range of sutures has grown considerably compared to the previous year. The virgin silk suture needles introduced based on the demand from the users received the CE mark certification. All the suture needle products received the WHO GMP certification from the Indian Drug Controller, which is useful for international marketing efforts.

Improvements were made on the suture needle packaging based on blister packaging and the use of new, attractive cartons. Based on the validation results of retained samples, the CE mark certifying body approved the increase in shelf life of the sutures from three years to five years. A marketing and distribution agreement was signed with a partner in USA for making Aurolab products available in new markets. In anticipation of increase in market demand, additional production personnel were recruited and trained on critical production processes which require considerable skill.

Aurolab worked with many international marketing partners to register its products in countries where such registration is mandatory. Registration in Rumania and Uruguay was completed. The suture needle division is planning to add synthetic absorbable suture needles and ophthalmic microsurgical blades to the product range. The microsurgical blades are widely used in phaco and manual Small Incision Cataract Surgery (SICS).



PHARMACEUTICAL DIVISION

The modern state-of-the-art facility, with a strong focus on producing non-available and high cost pharmaceuticals, introduced a range of new ophthalmic formulations. The new cost-effective products formulated, tested and introduced to the market include: 1) Trypan Blue, for use as an aid for visualising the hard to see capsule during capsulorrhexis, 2) Perfluoro Octane, a purified fluid used as a tamponade during retinal detachment surgery, 3) Clotrimazole, an effective drug for corneal fungal ulcers, and 4) Pilocarpine Nitrate, an injectable, not readily available drug for constricting the pupil after surgery. With this new addition, the total number of products from this division increased to about 25.

At present Aurolab is the sole Indian manufacturer of Econazole, Clotrimazole and Prednisolone Sodium Phosphate eye drops. The two retinal tamponades, Silicone oil and Perfluoro Octane, introduced by Aurolab have been well received and are used by many surgeons around the world.

Aurolab used locally available glass vials for packing the various eye drops. Though this was cost-effective, Aurolab initiated efforts to use plastic dropper bottles as per the international standards for eye drops. Aurolab imported high quality plastic bottles and gradually switched over to these for most of its formulations.

Aurolab pharmaceuticals and suture needles that are covered under the Indian Drug Control Act received WHO GMP certification, which enables the sale of these products in international markets. The HPMC viscoelastic and Trypan Blue were awarded the prestigious CE mark certification based on the clinical test data provided and a rigorous audit of the facility by the certifying body.

The plans of pharmaceutical division include formulation of the following eye drops: 1) Brimonidine Tartrate, for glaucoma, 2) Trifluoro Thymidine, an antiviral, 3) Povidone Iodine, an anti-infective and 4) Sodium Citrate, a solution to treat chemical and fire burns.

SPECTACLE LENS DIVISION

The detection of refractive errors and correction of these errors through spectacle lenses has been identified as a major requirement by WHO, for reducing avoidable blindness due to refractive errors. The Aravind Eye Care System initiated various efforts to improve the prescription and provision of spectacles to address this problem. As part of this effort, the spectacle lens division was established in 1999 to provide technical support services in production, quality control and training areas for the optical shops at Aravind Eye Hospitals.

Introduction of appropriate technologies for in-house processing of plastic spectacle lenses was identified as the first major need for making plastic lenses available and affordable at the optical shops. A laboratory with plastic lens surfacing and computerised edging capability was established. This facility 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 years.

Additional lens edging facilities were set up close to the optical shops in all Aravind Eye Hospitals to facilitate quick delivery. The availability of these facilities has made it possible to provide better customer service, prepare readymade glasses for prompt delivery in eye camps and also to provide training programmes for opticians in the optical shops and laboratories. Personnel for manual edging of glass lenses were trained and deployed in various optical shops to provide increased production capacity.

The spectacle lens division acquired the scratch resistant coating system to provide a hard coating on both sides of the plastic lenses. The capability to provide special color tints to satisfy the needs of low vision patients was also added. The division has plans to establish in-house production facilities for glass lens processing and antireflection coating of glass lenses for improving the quality and to provide better customer service.

Rotary Aravind International Eye Bank

Started in 1998, the Rotary Aravind International Eye Bank is a member of the International Federation of Eye Banks and the Eye Bank Association of India. With state-of-the-art equipment, and manned by efficient and skilled technical personnel to procure, process, preserve and distribute corneas, a strict regimen is maintained for quality control to prevent infection. The corneal procurement team is ready at any time to receive donations from the deceased. The Eye Bank at Aravind-Coimbatore is affiliated with the Eye Bank at Aravind-Madurai and has the necessary facilities to process, store, and perform various types of corneal grafting.

16th National Eye Donation Fortnight

Aravind Eye Hospital, Madurai, August 25- September 8

To celebrate the spirit of eye donation, National Eye Donation Fortnight was observed by Rotary Aravind International Eye Bank, to aggressively promote eye donation, for a two-week period by carrying out various promotional activities like delivering awareness lectures, counselling, display of banners/posters in prominent places, and felicitation for donor families. Common doubts that patients had, were cleared and about 200 patients pledged their eyes for donation.

Posters highlighting the need for eye donation and slogans were displayed at prominent public places to educate the masses about the need for eye donation. Messages on eye donation were flashed on the local cable television stations.

To publicise and deliver the message on the need for eye donation and to increase the number of donors, local press members were invited to attend the meeting.

Awareness lectures were also conducted at various places during the fortnight, organised by various clubs and communities. An awareness lecture at Mithra Niketan (old age home) and to the general public of Krishnapuram colony was organised by Sourashtra Seva Sangh and the Medical Director of the Eye Bank. Lectures were given at Rotary clubs and Lions meetings by medical officers of Aravind Eye Hospital.

In addition a letter was sent to the medical superintendent/chief medical officers of six major multi specialty hospitals in Madurai, stressing the need for enhancing cornea procurement through another hospital cornea retrieval programme. Further, the need for cooperation and support from the authorities and hospital staff was emphasised. The single most important and beneficial thing that can be offered to the donor is the simple gesture of thanks to the "Donor Family". To felicitate the donor family, a function, presided over by the District Collector, Sethu Ramachandran, was organised by Rotary Aravind International Eye Bank at Aravind Eye Hospital. Representatives from donor families were invited to share their feelings and were honoured. Representatives from the Rotary and Lions club were also invited.



National Eye Donation Fortnight

Workshop on Grief Counselling

(organised by Rotary Aravind International Eye Bank)

Aravind Eye Hospital, Madurai, September 29-30

To increase the procurement of donor eyes, through the hospital corneal retrieval programme (HCRP), at the request of the Government of India a two-day workshop on grief counselling was organised. The workshop was supported and assisted by the National Programme for the Control of Blindness. The main focus of the workshop was to orient the counsellors and health care professionals about the need for eye donation and the role of the hospital staff in creating awareness and motivating potential donors for eye donation.

Dr. M. Srinivasan

—*Facts about eye donation*

Ms. Brinda Priyadarshini

—*Organisation and functions of an eye bank*

The successful model of HCRP in Hyderabad was highly supported by Government of India. Eminent persons in the field of eye banking discussed the legal procedure involved and the importance of family consent in eye donation. The psycho-social and cultural beliefs about eye donation were also discussed. A video on Insitu corneal excision was shown to the participants. Twenty participants from various districts and local hospitals attended the workshop.



'Perspective of eye donation in Indian culture'- Prof. Venkatarathinam

Seminar on Eye Donation and Hospital Cornea Retrieval Programme (HCRP)

Aravind Eye Hospital, Coimbatore, August 29

A seminar on eye donation and HCRP was coordinated by Mr. Uthamarajan, Eye Bank Manager. Medical and paramedical staff from P.S.G. Medical College and Hospital, Coimbatore Medical College Hospital, Kovai Medical Centre Hospital, Sri Ramakrishna Hospital, G.K.N.M Hospital, attended the seminar. Dr. R. D. Ravindran gave a comprehensive overview of the eye donation status in our country, the importance of HCRP and the purpose of this seminar. The scientific session was conducted by the staff of the cornea department.

Dr. Sandeep Arora discussed corneal blindness, its causes and the importance of keratoplasty as therapy. Dr. Anita Raghavan discussed the facts of eye donation. She also put forward the present statistics of corneas needed, eyes donated, and the backlog of the patients awaiting corneal transplantation.

Dr. Revathi discussed the hesitations and taboos in eye donation and various approaches to overcome it and added the important role played by the various voluntary organisations in acting as bridge between the eye banks and the potential donors. She also discussed the hospital cornea retrieval programme and the way in which it has been implemented successfully elsewhere, and the role of the hospital staff as grief counsellors.

A video on eye donation at home and the keratoplasty procedure was shown. Following this Dr. Balasubramaniam and other members from Valavadi Lion's Club, which is functioning very successfully in the small town of Udumalpet, and the surrounding villages in promoting eye donation, shared their experiences with the audience. In the final interactive session, the participants showed a lot of enthusiasm in taking part in the programme. The following is a sample of the topics discussed:

- An order from the local DGP permitting the hospital and the eye bank to proceed with eye retrieval from accident victims if the families are willing.
- Inclusion of a query in the death certificate asking the relatives' willingness for eye donation as an indirect reminder.
- Getting permission from the hospital management to display posters about eye donation. It was agreed to form task forces to decide on the various steps to be taken. The eye bank then will talk with the concerned authorities.

Partners in Service

Aravind is grateful to all the organisations that have joined hands with the Aravind Eye Care System in its war against blindness. 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, USA
- Light House International, USA
- Lions International, USA
- Orbis International, USA
- Rotary International, USA
- Seva Foundation, USA
- Seva Service Society, Vancouver, Canada
- Sight Savers International, UK
- The Tractor and Farm Equipment Limited (TAFE) Company, Madurai
- Voluntary Service Overseas (VSO), UK
- Zurich Financial Services, Community Trust, UK

FOR RESEARCH

- Alcon Pharmaceuticals, Fort Worth, USA
- Allergan Inc., USA
- Department of Ophthalmology, University of Iowa, USA
- Humphrey Instruments, 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, USA
- Johnson & Johnson, USA
- London School of Hygiene and Tropical Medicine, UK
- National Eye Institute, USA
- Netherlands Ophthalmological Research Institute, The Netherlands
- Proctor Foundation, USA
- Royal Tropical Institute, The Netherlands

Volunteers and Visitors

- Dr. Robert Peterson and Mrs. Veronica Peterson, Boston, USA, were at Aravind as volunteers for four weeks. Dr. Peterson gave lectures to the postgraduate students on: Retinoblastoma; Orbital tumour; Congenital anomalies; Retinopathy of prematurity; Strabismus - Clinical examination and esotropia. Mrs. Peterson volunteered her services for the community work done by ACWCCH.
- Mr. Mark Henderson, Zurich Financial Services, UK came for developing implementation guidelines for the Integrated Hospital Management System (IHMS) software developed at LAICO.
- Ms. Marilyn, Dr. Jack Whitcher, Dr. David Gritz, Mr. Doug Owens, Dr. Tom Lietman, Dr. John Wilkins, Proctor Foundation, USA came for the annual cataract evaluation third year follow-up.
- Mr. Mike Price and Mr. David Green, USA came to discuss with Aurolab about taking over Sutratec from Seva Foundation and through it make suture needles available at affordable prices to other parts of the world. Mr. David Green, who has been a regular visitor and long time supporter of our activities, also discussed the development of LAICO's capacity.
- Dr. Abha Kumar and Dr. Vicky Cevallos, Proctor Foundation, USA came for the projects —Transport medium in corneal ulcer and Genetic study in patients with macular corneal dystrophy
- Michael E. Taylor, SEVA volunteer, USA was here to help develop a consultancy tool
- Ms. Elizebeth Barnert and Ms. Alexandra Stanculescu, California, US, Seva volunteers came to help in ACWCCH's health education project.
- Dr. Scott Smith, Proctor Foundation, USA, DSMC chairman came to supervise the Antioxidant study.
- Mr. Steven Mansberger, USA studied the glaucoma screening utilising frequency doubling perimetry on the antioxidant subjects in rural India.
- Mrs. Leslie and Dr. Thomas France, USA looked for the possibility of accreditation by JCAHPO of Aravind's nursing training programme.
- Dr. Afzal Ahamad and his wife from USA came to have an overview of Aravind's model. They plan to start a hospital in Pakistan.
- Ms. Mary Ann Lang, PhD, Dr. Ben Freed, Ms. Nicola Sheperd, Programme Officer, Lighthouse International, USA came regarding the collaborative efforts between Aravind Eye Hospitals and The Lighthouse International, New York, USA in the area of low vision devices - creating awareness, setting up lowvision clinic, extension of existing lowvision services and manufacturing of cost effective and quality devices.
- Dr. Chundak Tenzing, Director Seva Sight Programs, Nepal visited Aravind-LAICO with two ophthalmologists, one from B P Koirala and the other from LRAEH, to discuss the modus operandi for the planned Lumbini Eye Institute, which will be developed as a training centre for Nepal in eye care. They discussed with Dr. N.V. Prajna and Mr. Keerti Pradhan about the broad strategies and actions for the next step. Dr Tenzing will coordinate the entire effort of LEI.
- Dr. Leon Ellwein, National Eye Institute, USA and Ms. Sarah Ellwein were at Aravind

Volunteers and Visitors



Ln. Frank Moore, First Vice President, Lions Clubs International and Ms. Rita Moore with Dr. G. Venkataswamy

in January. Dr. Leon Ellwein worked on the analysis of the data from Sivaganga and Tirunelveli surveys.

- Dr. Emmet T Cunningham, Proctor Foundation, USA came regarding the existing collaborative studies between Proctor Foundation and Aravind Eye Care System.
- Ln. Frank Moore, First Vice President, Lions Clubs International and Ms. Rita Moore
- Ms. Lakshmi, IACLE India co-ordinator, LV Prasad Eye Institute, Hyderabad
- Mrs. Andrea Mackie and Dr. Dennis Robertson, Director of Retina Service, Mayo Clinic, USA.
- Mr. & Dr. Jasmine Hayes, Harvard Medical School, USA
- Dr. Malou Hogsbro, Denmark
- Dr. S.A. Sankaranarayanan, Regional Institute of Ophthalmology, Egmore, Chennai came as a representative of PG selection committee member of Tamilnadu Dr. M.G.R. University
- Dr. Todd Bottger, Dr. Jason Hekl, Dr. Nida Shamsy, Dr. Dane Dore MBA students from University of Michigan, USA
- Dr. Chandrasekar and Dr. Rajendra from Srikan Institute, Kakinada, Andhra Pradesh
- Mr. Anthony Stephen Carlson, Dept. of Optometry, Rand Afrikaans University, South Africa was at Aravind as an observer for the study done at Madura Coats - on Impact of Uncorrected Vision. He accompanied the Aravind team to test the sight of employees at Madura Coats.
- Chairman of Eye Hospitals under Nepal Netra Jyoti Sangh, Mr. K.R. Joshi: Lumbini Rana Ambika Eye Hospital, Lumbini; Mr. S.D. Joshi: Geta Eye Hospital, Kailaly; Mr. G.S. Dangi: Rapti Eye Hospital & Rehabilitation Centre, Dang; and Mr. R.B. Amatya: Primary Eye Care Centre, Malangwa, Sarlahi, Nepal visited Aravind to observe the management activities at Aravind. The team visited Aravind-Madurai, Theni and a screening camp. They met and had discussions with all the senior management at Aravind Eye Hospital and LAICO.
- Ms. Amy Vastine, Seva Volunteer, USA, conducted a number of focus group discussions to find out attitude and knowledge on parenting and nutrition in Kariapatty block.
- Dr. Michael Kent Ranson, Research Scholar, London School of Science and Tropical Medicine, UK, visited Aravind to observe the Madura Coats study research design as an external observer. He visited the employees homes to have a discussion with them about the benefit of spectacles at work and at home.
- Mr. James McLeod, Consultant, GIS Ltd. UK, visited Aravind to oversee the process of the Madura Coats study.
- Dr. Bert Muller, Germany was here to improve the electrophysiology department.
- Ms. Jacqueline, Chief Executive Officer, Acumen Fund, USA came to understand the mission and functioning of Aurolab and Aravind Eye Hospital and to look for potential areas of collaboration.



Dr. Michael Kent Ranson and Mr. Kannan -- Madura Coats study

- Ms. Esme Gross and Ms. Tammy Kimbrough were here for data monitoring in Allergan Paediatric study.
- Dr. A.K. Gupta, New Delhi, Dr. P.R. Chatterjee, Kolkatta, Dr. C. R. Thirumalachar, Bangalore came as examiners for the Dip. NB practical examinations
- Dr. Vijay Aruldas, Vellore
- Mr. Soren Sen, from DGM- (a notified body in Europe which certifies medical devices for “CE mark,”) Denmark came to Aurolab for yearly surveillance audit to maintain the status of “CE mark.” The audit was successfully completed and it was certified that Aurolab maintains a quality system in compliance with “CE mark” regulations.
- Dr. Neena Gadangi, Paediatric Fellow, University of Illinois, Chicago, USA
- Dr. Steen Tandrup, Chief Advisor, DANPCB (DANIDA) came here to visit the hospital and understand the various activities performed by Aravind Eye Hospital and Lions Aravind Institute of Community Ophthalmology.
- Ms. Elizabeth Kurian, Sight Savers, Mumbai
- Mr. Jeff Liberman came to discuss the activities of Aravind Centre for Women, Children and Community Health
- Ms. Ali King, India Programme Manager, Zurich Financial Service came to review the volunteer support provided by Zurich Financial Service, UK
- Dr. Shah Alam, Bangladesh, WHO Fellowship came to observe and understand the way the clinical part of the Aravind Eye Care System works.
- Ms. Niki Smith, Grants Coordinator, Seva Foundation, USA came here to gain broad exposure to overall activities of Aravind Eye Care System and also to know more about the health education projects, paediatrics eye care and the training programmes with emphasis on management courses and paramedical training.
- Dr. Edoardo Baglivo, Consultant Uveitis, Switzerland came to study the pattern of Indian uveitis.
- Mr. Rod Watkins, Chief Executive, Scan Optics came to see the Aravind Eye Care System and to discuss appropriate technology in eye care
- Prof. Brien Holden, Chairman, International Centre for Eye Care Education, Australia, briefed the Aravind senior management team about the current research, educational and product development programmes carried out in the Co-operative Research Centre for Eye Research and Technology (CRCERT) and Cornea and Contact Lens Research Unit (CCLRU) at the university.
- Mrs. Lalitha Raghuram, Executive Director, Eye Bank Association of India, Hyderabad and Dr. Usha Gopinathan, Administrative and Scientific Director Ramayamma International Eye Bank, L.V. Prasad Eye Institute, Hyderabad, Dr. Rajkumar, Under Secretary, Director General of Health Services Ophthalmology, Government of India, came as resource persons for the Workshop on Grief Counselling

Volunteers and Visitors



Jha and Wavy at Aravind

- Ms. Helen Whalen, New York, USA
- Dr. Tun Aung Kyaw, Short-term consultant, WHO, New Delhi came to finalise the protocol on prevention of corneal ulceration - WHO project
- Dr. R.A. Hartskeerl, Director Leptospirosis Research Laboratory Royal Tropical Institute, Netherlands
- Dr. Mehta, New Delhi, came to conduct the GMP (Good Manufacturing Practice) audit of Aurolab
- Dr. Rajagopal, Chennai, came to attend the local advisory committee meeting for the health education project.
- Dr. Anilbhai and Dr. Lataben came to enable long-term interactions between SEWA Rural and Aravind Eye Hospital.
- Ms. Anita Ramachandran, Cerebrus Consultants, Mumbai, came to Aravind as a human resource consultant.
- Mr. Jeff Waller, Ms. Alka Dev, Helen Keller Worldwide, USA
- Dr. John Kempen, USA, came to explore the possibility of future collaborative research between Aravind Eye Hospital and Wilmer Institute.
- Mr. David Green, USA, came to discuss the hearing aid project and to look of the possibility of setting up manufacturing units for the project.
- Mr. Craig Butler, Mr. Chuan Ooi and Mr. Wilson, ICEE, Sydney, Australia, and Mr. Vallam S. Rao, LVPEI, Hyderabad, came to conduct Educators Presbyopia Education Programme.
- Ms. Alka Dev, Deputy Director for Helen Keller Worldwide Eye Health Department, HKW, New York came to explore potential areas for HKW to collaborate with AECS
- Dr. Aminul Islam and Mr. K.P. Rajendran, ORBIS International came to discuss the telemedicine project, paediatric eye care services and Chitrakoot project
- Wavy Gravy and Mrs. Jahanara, Seva Board members finally made it to Aravind for the first time after twenty five years of association with it .

Awards and Accolades



*d*uring the year Aravind has received recognition both at the institutional and individual levels.



Raja Lakshmi award for Dr. G. Venkataswamy

DR. G. VENKATASWAMY

—was selected for the B.C ROY AWARD for the year 2000 recognising him as an ‘eminent medical person’

—was awarded the prestigious RAJA LAKSHMI AWARD. This award has been instituted to promote arts, literature, science, humanities and other intellectual pursuits. The award consists of 1 lakh cash, a citation and a memento. The Dr. K.V. Rao and Dr. Jyothi Rao awards were also awarded to him.



E.T. SELVAM AWARD for Dr. R. Ramakrishnan

DR. G. NATCHIAR

—was given the A.P.C VEERABHAHU MEMORIAL ORATION AWARD in appreciation of three decades of excellence in Academic, Clinical and Preventive Ophthalmology at National and International forums by The Tuticorin branch of the IMA on February 18, 2001.

—was presented the DOCTOR’S DAY AWARD by the Indian Medical Association, Tamilnadu on July 1, 2001 in appreciation of her services in various areas of ophthalmology such as technical development, training surgical ophthalmologists and striving to reduce childhood blindness and make India “A Blindness Free Country”

DR. M.SRINIVASAN

—was awarded the BEST TEACHER AWARD in the Padmabhushan Dr.P.Shiva Reddy awards function, on September 12, 2001 by the Andhra Pradesh Akademi of Sciences, Hyderabad.

DR. R. RAMAKRISHNAN

—was awarded the E.T. SELVAM AWARD for the best poster “Microbial Keratitis in Children” at the AIOS conference held at Kolkatta held from January 4-7, 2001.

Awards and Accolades



Dr. R.D. RAVINDRAN receiving the Dr. S.U. Joshi Oration award

DR. R.D. RAVINDRAN

—was given Dr. S.U. Joshi Oration award on July 1, 2001 at Yavatmal, Maharashtra during the Vidarbha Ophthalmic Society Meeting.

DR. S.R. RATHINAM

—was selected for the prestigious ‘R.N. MATHUR AWARD’ for her ‘Outstanding Ophthalmic Services in the field of Medical Ophthalmology in India’. This award is given once every four years. The award will be given to her during the 60th All India Ophthalmological Conference in the year 2002.



Dr. S.R. RATHINAM receiving the R.N. MATHUR Award

DR. PARTHASARATHY SATHYAN

—has been conferred the MOST PROMISING RESEARCH PRESENTATION AWARD by Allergan-Glaucoma society of India at the XI Annual Meeting of the Glaucoma Society of India, Indore, Madhya Pradesh

DR. USHA KIM

—received the DR. C.P. GUPTA AWARD for the paper “Scleral strips for frontalis surgery” presented at the 48th Tamil Nadu Ophthalmic Association Conference held at Madurai.

MS. BANUMATHI—OT Nurse, and **MS. KOPPAMMAL**—Refraction nurse

—were awarded the SUBBA NAIDU AWARD by the Suba Naidu and Gomathiammal Trust on February 26, 2001.



Dr. USHA KIM receiving the Dr. C.P. GUPTA Award

DR. C. SENTHILNATHAN and **DR. L. RAMAKRISHNA REDDY**

—won the 2ND PRIZE IN THE GLAUCOMA QUIZ COMPETITION conducted by Allergan India Ltd. at Chennai on December 24, 2001

DR. M.R.S. GOPAL, DR. P. ANAND and **DR. ANAND RAJENDRAN**

—won the STATE LEVEL QUIZ COMPETITION.

DR. R. VENKATESH

—won the BEST VIDEO FILM AWARD in the 49th Tamil Nadu Ophthalmic Association conference.

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Aravind-Madurai
1, Anna Nagar, Madurai - 625 020, Tamilnadu, India
Phone: (0452) 532653; Fax: 91-452-530984; E-mail: aravind@aravind.org

Aravind-Theni
Perakulam Road, Theni-626 531, Tamilnadu, India
Phone: (04546) 52553; E-mail: info@theniaravind.org

Aravind-Tirunelveli
Swamy Nellaippar High Road, Tirunelveli Jn.-627 001, Tamilnadu, India
Phone: (0462) 337103; Fax: 91-462-331633; E-mail: info@tvl.aravind.org

Aravind-Coimbatore
Avinashi Road, Coimbatore-541 014, Tamilnadu, India
Phone: (0422) 573901; Fax: 91-422-593030; E-mail: info@cbearavind.org

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LIONS ARAVIND INSTITUTE OF
COMMUNITY OPHTHALMOLOGY

72, Kuruvikaran Salai, Gandhinagar, Madurai 625 020, Tamilnadu, India
Phone: (0452) 537580; Fax: 91-452-530984; E-mail: aravind@aravind.org



**Aravind Centre for Women,
Children and Community Health**

Munthirithoppu, Anna Nagar, Madurai-625 020, Tamilnadu, India
Phone: (0452) 532653; Fax: 91-452-530984; E-mail: lakshmi@aravind.org



Rotary-Aravind International Eye Bank
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1, Anna Nagar, Madurai - 625 020, Tamilnadu, India
Phone: (0452) 532653; Fax: 91-452-530984; E-mail: eyebank@aravind.org

ARAVIND MEDICAL RESEARCH FOUNDATION

1, Anna Nagar, Madurai - 625 020, Tamilnadu, India
Phone: (0452) 532653; Fax: 91-452-530984; E-mail: aravind@aravind.org

 **aurolab**

72, Kuruvikaran Salai, Gandhinagar, Madurai 625 020, Tamilnadu, India
Phone: (0452) 537580; Fax: 91-452-530984; E-mail: aurolab@aurolab.com



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