



## Eastern Regional Eye Care Programme Sagarmatha Choudhary Eye Hospital, Lahan Biratnagar Eye Hospital, Biratnagar



### ANNUAL REPORT 2009

The Eastern Regional Eye Care Programme (EREC-P) was developed in co-operation with Nepal Netra Jyoti Sangh (NNJS), the Social Welfare Council of Nepal and the German INGO CBM. It comprises of:



- **Sagarmatha Choudhary Eye Hospital (SCEH) in Lahan**, which has been constantly growing throughout the past 27 years



- **Biratnagar Eye Hospital (BEH) in Biratnagar**, started in September 2006. Under the leadership of the dedicated Medical Director Dr. Sanjay Kumar Singh BEH has already seen a tremendous increase in patients and operations during its first three years.
- 6 Satellite Clinics/Primary Eye Care Centres in the Terai as well as in the hills.

Modern equipment together with dedicated staff and effective management makes EREC-P the centre of attraction for thousands of patients. It is a high volume treatment programme, which provides high quality comprehensive eye services at a cost affordable to a huge population in eastern Nepal and northern India.

The excellent eye services and their affordability have a remarkable impact on the improvement of the quality of life and economic situation of reversibly blind persons and those at risk of blindness.

**HIGHLIGHTS:**

**76,357 Surgeries  
incl. 30,340 at BEH and its camps**



**Dr. Sanjay Kumar Singh**



**Dr. Lalit Surin**

**5 Surgical Camps in hill districts  
to serve the poor in remote areas**

**Start of Construction  
of new BEH complex**



**OUTPATIENTS:**



<b>SCEH, Lahan</b>	<b>: 120,154</b>
<b>Biratnagar Eye Hospital</b>	<b>: 132,932</b>
<b>6 Satellite Clinics/PECCs</b>	<b>: 58,504</b>
<b>108 Cat. Screening Camps' Patients</b>	<b>: 23,039</b>
<b>5 Surg. Camps' Outpatients</b>	<b>: 3,527</b>
<b>3 Diabetic Camps' Patients</b>	<b>: 278</b>
<b>TOTAL</b>	<b>: 338,434</b>

**SURGERY:**



<b>SCEH, Lahan</b>	<b>: 44,374</b>
<b>Biratnagar Eye Hospital</b>	<b>: 29,956</b>
<b>Satellite Hosp. Malangwa:</b>	<b>1,465</b>
<b>5 Cat.Surg.Camps</b>	<b>: 562</b>
<b>TOTAL</b>	<b>: 76,357</b>

<b>Cataract</b>	<b>: 62,553</b>
Sutureless ECCE/IOL (SICS)	: 48,842
Sutured ECCE/IOL	: 1,329
On children	: 1,264
Phaco ECCE/IOL	: 9,602
Other lens removal procedures	: 1,516
<b>Glaucoma</b>	<b>: 2,560</b>
Trabeculectomy	: 1,184
Combined Cat&Trabeculectomy	: 423
Trans scleral cyclo photocoagulation:	215
Nd. YAG iridotomy	: 697
Surgical PI	: 41
<b>Corneal Surgical Procedures</b>	<b>: 95</b>
Keratoplasty	: 22
Amniotic Membrane Graft (AMG)	: 73
<b>Vitreo-Retinal Surgery</b>	<b>: 964</b>
Pars plana Vitrectomy	: 933
Scleral Buckling	: 31
<b>Laser procedures</b>	<b>: 2,710</b>
Retinal Laser	: 1,264
Nd. YAG capsulotomy	: 1,446
<b>Dacryocystorhinostomy</b>	<b>: 1,143</b>
<b>Dacryocystectomy</b>	<b>: 960</b>
<b>Others</b>	<b>: 5,372</b>
<b>TOTAL</b>	<b>: 76,357</b>

## SPECIAL SERVICES:

### Paediatric Department



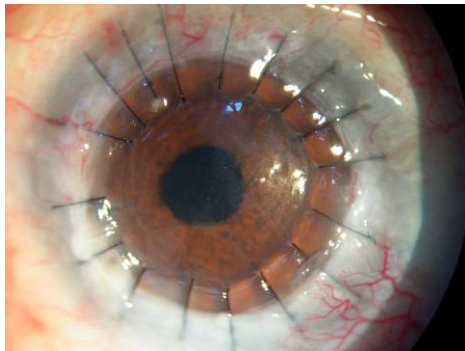
Examination: 22,671 children



Dr. A. Hennig

Surgery: 2,266 (1,264 cataract)

### Cornea Department



- 2,996 corneal ulcer patients
- **A Cornea Collection Centre** was started also at SCEH in July.
- Several **awareness programmes for Eye Donation** were organised in co-operation with local organisations, so that understanding and acceptance of corneal transplantation in the society reached a higher level. Due to these efforts 26 corneas were harvested and 1,532 people filled up eye donation willingness forms.

### Vitreo-Retinal (VR) Department



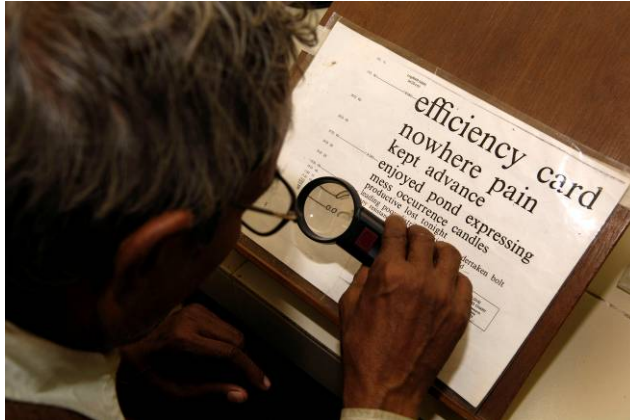
VR Specialist Dr. Iris Winter

The VR Departments of SCEH and BEH are very well equipped with the latest technology. BEH just received also an Optical Coherence Tomography (OCT) machine. The BEH VR Department runs special awareness programmes on Diabetes, its related blinding potential and possible early prevention with laser treatment and conducted 3 Diabetic Camps.

### Glaucoma Department

Special glaucoma investigation was continued and 2,767 computerised visual field examinations were done.

## Low Vision Department



1,146 patients with low vision were assessed, including 255 children.

Special low vision devices were offered to those who required them for improving their vision.

### Subsidy to poor patients:

95% of all patients pay NPR 1,000-1,300 (USD 13-17) for major surgery.

8,087 poor patients presenting at SCEH and BEH or in Screening Camps received free or subsidized treatment or even food and transportation support, amounting to a total of NPR 2,998,250 (USD 40,517).

### OUTREACH ACTIVITIES:

#### Satellite Clinics:

Besides the Satellite Clinics in Malangwa, Rajbiraj, Siraha and the Primary Eye Care Centres (PECC) in Diktel and in Gaighat, EREC-P is running **one additional PECC in Bhojpur**, Koshi Zone since 16<sup>th</sup> July 2009.

#### Cataract Screening Camps:



#### Cataract Surgical Camps:



These camp activities are aiming at reaching Nepali patients who are either too poor to pay for their surgery or live in remote hill areas and cannot come to SCEH and BEH for treatment.

108 **Cataract Screening Camps** were performed in collaboration with local organisations in the 6 **Terai** districts Siraha, Saptari, Sarlahi, Udayapur of Sagarmatha Zone and Morang & Sunsari districts of Koshi Zone.

Out of 23,039 patients examined 3,331 were transported to SCEH Lahan, Biratnagar or Malangwa and underwent cataract surgery free of cost or subsidised.

In 5 **Cataract Surgical Camps** in the hill districts Diktel, Bhojpur, Terhathum, Dhankuta and Khandbari 3,527 patients were examined and 562 eye surgeries performed.

### **School Screening & Paediatric Camps:**



1,880 children were screened in 11 schools



Vitamin A capsules distribution

In two special **Paediatric Camps** 1,293 children were examined.

### **HUMAN RESOURCE DEVELOPMENT and TRAINING :**

Besides continuous medical education for the hospitals' ophthalmologists the following special teaching and training programmes were performed:

#### **Anterior Segment Fellowship:**

9 Ophthalmologists are undergoing the two-year Anterior Segment Fellowship at SCEH and BEH, which also includes training in sutureless cataract surgery (Fishhook Technique) and phacoemulsification.

#### **Vitreo-Retinal Fellowship:**

Two ophthalmologists are undergoing a two-year Vitreo-Retinal Fellowship at BEH.

#### **Co-operation with BP Koirala Lions Centre for Ophthalmic Studies (BPKLCOS), Kathmandu and BP Koirala Institute of Health Sciences (BPKIHS), Dharan:**

#### **Post-graduate MD Residents in Ophthalmology:**

- 1 Resident from BPKIHS, Dharan attended a one-month comprehensive clinical and surgical training.
- 5 Residents from BPKLCOS, Kathmandu attended a two-month comprehensive clinical and surgical training.
- EREC-P is sponsoring four candidates for the three-year post-graduate MD Residency in Ophthalmology at BPKLCOS, Kathmandu.

#### **Optometrists:**

6 Optometrists students from BPKLCOS, KTM underwent a one-month training.

**Various other Orientation and Trainings at EREC-P and outside:**

Various other orientations and short and long-term ophthalmic trainings continued also in 2009:

To Eye Health Workers, Health Assistants, Staff Nurse Students from other institutions, Auxiliary Health Workers, Auxiliary Nurse Midwives, Health Posts-in-Charge, Drug Retailers, Traditional Healers and Female Community Health Volunteers, as well as one-month Elective training to international medical students.

Dr. Rinki Kumari Singh: one-week **Management Priorities in Eye Care Delivery training** at Aravind Eye Hospital + **Paediatric CME** in January.

Three staff underwent one-month training each: **“Grief Counsellor Training”** at LV Prasad Eye Institute, Hyderabad/India, in **Orthoptics** at Shroff Charity Eye Hospital in Delhi/ India and for **Cornea Collection** at Nepal Eye Bank in Kathmandu.

**MISCELLANEOUS:**

**Staff at all EREC-P Centres:**

The 273 member staff consists of 19 ophthalmologists (1 VR surgeon, 7 long-term ophthalmologists, 11 Fellows), 16 administrative staff, 20 ophthalmic assistants, 4 health assistants, 2 optometrists, 57 eye health workers and 70 eye health worker trainees.

**“Cataract Package Tours”:**



351 busses and 43 jeeps brought 12,218 patients to the centres for cataract surgery.

**Co-operation between SCEH and IMPACT Nepal in Lahan:**

In view of the high prevalence of hearing impairment and ear diseases, SCEH has been providing support and part of its premises free of cost for a **Primary Ear Care Centre** and surgical ear camps.

**Rapid Assessment of Avoidable Blindness (RAAB) Survey:**

The RAAB Survey, started in 2008 in Sagarmatha Zone and Koshi Zone was completed in 2009.

**Visitors & Visiting Faculty & Guest Lecturers:**

- 28 visitors came mainly to observe the eye work.
- **Prof. Christian Mardin**, Erlangen University in Germany provided clinical training to ophthalmologists, residents and ophthalmic assistants and spoke on various glaucoma topics in March/April.
- **Prof. Arin Chatterjee** from India provided Continuous Medical Education for ophthalmologists and ophthalmic assistants and spoke on “Ocular Prosthesis” in June.
- **Dr. Shankar Man Rai**, Plastic Surgeon from Model Hospital, Kathmandu spoke on “Plastic Surgery in Nepal” on 3 July.

- **Dr. Sanjeev Thakur**, ENT consultant spoke on “Endoscopic Dacryocystorhinostomy surgery” on 21<sup>st</sup> July.
- **A CBM Italy/Mediafriends Team** visited in November.

### **Meetings, Workshops and Conferences in Nepal:**

- Three-days **CBM Project Cycle Management (PCM) Training**, Kathmandu, 19.-21.1.09: 6 EREC-P participants.
- BEH organised a **Glaucoma Symposium** on 31.3.09 (Prof. Christian Mardin as Speaker).
- **4<sup>th</sup> Eastern Regional Ophthalmic Workshop at Ram Lal Golchha Eye Hospital**, Biratnagar, 2.5.09: 15 EREC-P participants contributed with 10 presentations.
- **CBM SARON Regional Strategy Consultation Meeting**, Kathmandu, 16./17.9.09: Dr. A. Hennig, Dr. Sanjay Kr Singh, B. Mahato participated.

### **Presentations outside Nepal:**

- A. Hennig: 22<sup>nd</sup> DOC (International Congress of German Ophthalmic Surgeons) in Nürnberg/Germany, 18.-21.6.09: 1. *Paediatric Cataract Surgery*; 2. *Paediatric Cataract*; 3. *Long-term Assignments in Developing Countries*; 4. 2 Wetlab Instruction Courses on *Sutureless non-phaco Cataract Surgery (Fishhook Technique)*
- Dr. Lila Raj Puri: 13<sup>th</sup> Anniversary of BPKLCOS KTM, 9.9.09: *Post-operative astigmatism in non traumatic paediatric cataract surgery with IOL implantation*
- Dr. Sanjay Kumar Singh: DOG (German Ophthalmic Society) in Leipzig/Germany, 24.-27.9. 2009: *Corneal Ulcer management practices in rural Nepal*.  
Dr. Singh also visited University Eye Clinic in Halle, Germany (29.9.-1.10.09)
- A. Hennig: 17<sup>th</sup> Advent Symposium, Cologne/Germany, 5.12.09: *Adaptation of modern cataract surgery for developing countries*

### **Awards:**

- Dr. Hennig: First Prize for the video "Paediatric Cataract Surgery in Lahan, Nepal", DOC (International Congress of German Ophthalmic Surgeons) Video Competition in June.
- NNJS awarded "Nepal Netra Jyoti Samman Puraskar" to Mr. Ganesh Prasad Updhayay on 10<sup>th</sup> June.
- Dr. Sanjay Kumar Singh, Medical Director of BEH has been appointed Visiting Associate Professor of Tribhuvan University, Institute of Medicine, Kathmandu on 6<sup>th</sup> November.

### **Publications:**

- Hennig A  
**Nucleus management with Fishhook**  
Indian Journal of Ophthalmology, 2009 Jan-Feb;57(1):35-7.
- Hennig A  
**Sutureless Cataract Surgery with Nucleus Extraction – “Fishhook Technique”**  
Book Chapter and video in Ashok Garg et al: Master’s Guide to Manual Small Incision Cataract Surgery (MSICS)  
Jaypee Brothers Medical publishers, New Delhi 2009, 136-140.
- Shrestha JB, Bajimaya S, Hennig A  
**Outcome of probing under topical anesthesia in children below 18 months of age with congenital nasolacrimal duct obstruction**  
Nepal Medical College Journal, 2009 March: Vol.11 No.1: 46-49.
- Hennig A, Singh S, Winter I, Yorston D  
**Can phaco be a cost-effective solution to cataract blindness? Costs and outcomes in Nepal**  
Correspondence in EYE, 2009 November: eye.2009.241.

- Singh SK, Winter I, Surin L.  
**Phacoemulsification versus Small Incision Cataract Surgery (SICS): which one is a better surgical option for immature cataract in developing countries?**  
Nepalese Journal of Ophthalmology 2009;1(2): 96-100.
- Yadav SK, Winter I, Singh S K.  
**Management of Intra-vitreous cysticercosis**  
Nepalese Journal of Ophthalmology 2009;1(2): 143-145.
- Karki P, Shrestha JK, Shrestha JB  
**Hospital-based community cataract surgery: comparison of visual outcomes between conventional extra-capsular cataract extraction and small incision cataract surgery**  
Nepalese Journal of Ophthalmology 2009;1(2): 118-122.
- Karki P, Shrestha JK  
**Alport syndrome**  
Nepalese Journal of Ophthalmology 2009;1(2): 139-140.

### Special Events:

- **Construction of a new Biratnagar Eye Hospital Complex**

The presently rented buildings of BEH are hardly sufficient to accommodate the growing number of patients and are used at their capacity limits.

Therefore the construction of a new 300-bed eye hospital with facilities for outpatients and surgery, special departments and training became necessary.

CBM Co-worker Mr. Josef Schneider from Austria is the Project Manager for the construction, which after some delays started in October 2009.



Foundation Stone Laying by Dr. R. P. Pokhrel and Dr. A. Hennig on 19<sup>th</sup> September

Construction started in October

- Following the visit of a **Film team of the German TV station RTL** for film shooting at BEH and SCEH in March/April, Dr. Iris Winter, CBM Co-worker and VR-Specialist, and Dr. Ute Wiehler, CBM Co-worker and Ophthalmologist, were invited for life interview in RTL Magazin Stern TV in April, where also a short documentation on EREC-P was shown.
- Ms Susanne Grethlein and Mr. Max Reindl from the German company **Wavelight/Vision for the World**, supporting the VR Department of BEH already for some years, came for a follow-up visit in November and donated an Optical Coherence Tomography (OCT) machine for the BEH VR Department.

## **Financial Support:**

In addition to the INGO CBM as German Donor Agency the following organizations are also sponsoring the Eastern Regional Eye Care Programme:



### **European Commission (EC)**

The EC is supporting the Eastern Regional Eye Care Programme for 4 years (2008-2011) for “Improving the Quality of Life of Vulnerable Target Groups in the Eastern Region of Nepal by Improving Eye Care and Sight Restoration”.



### **Standard Chartered Bank (SCB)**



SCB is supporting the Eastern Regional Eye Care Programme for 4 years (2009-2012) through its **Seeing is Believing (SiB)** Programme in order to strengthen the eye care service delivery in eastern Nepal and significantly reduce the prevalence of blindness in Eastern Nepal, thus improving the quality of life and economic situation of reversibly blind persons and those at risk of blindness.

### ***Acknowledgements:***

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Special thanks go to his colleagues and all staff members. The combined effort of the enthusiastic team made the eye services of the Eastern Regional Eye Care Programme such a success.

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