

Nepal Netra Jyoti Sangh Lahan Eye & Ear Care System Sagarmatha Choudhary Eye Hospital, Lahan Biratnagar Eye Hospital, Biratnagar

"Forty-Two Years of Transformative Journey: Honoring Our Past, Shaping Our Future"

Vision: Sight for All

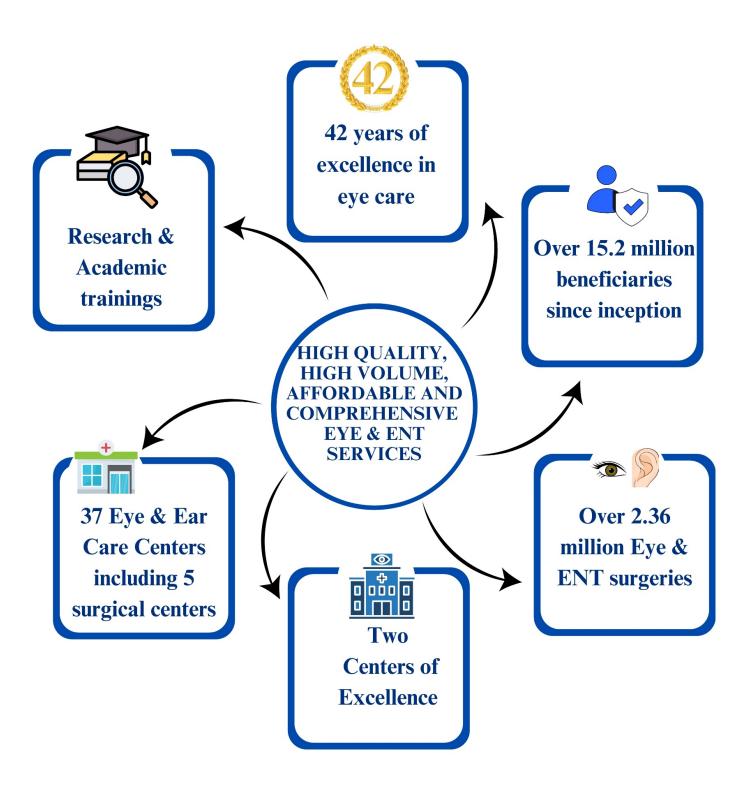


ANNUAL REPORT 2024





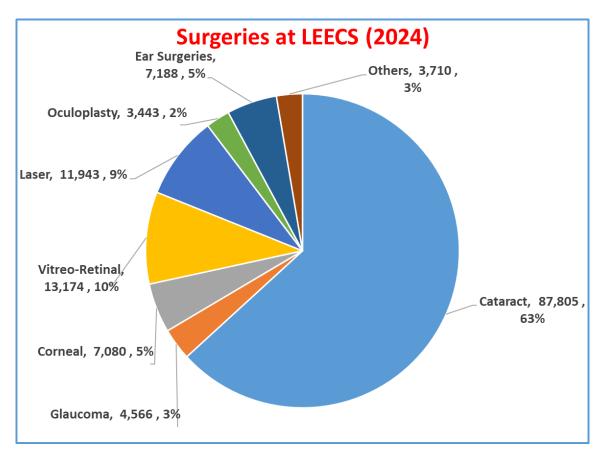
LEECS at a glance















Nepal Netra Jyoti Sangh, Lahan Eye and Ear Care System (LEECS) is a non-profit organization providing high-quality eye care services along with comprehensive approach in the eye and ear care. The services are very much accessible and affordable for people of all socioeconomic backgrounds. LEECS is an umbrella of 2 tertiary level hospitals (Sagarmatha Choudhary Eye Hospital and Biratnagar Eye Hospital) and 37 Eye and Ear Care Centres. The program is providing services to a large number of populations of Koshi, Madhesh and Bagmati Province of Nepal and neighbouring countries.

HIGHLIGHTS

Highest number of Patients treated & Highest number of Surgeries since its establishment

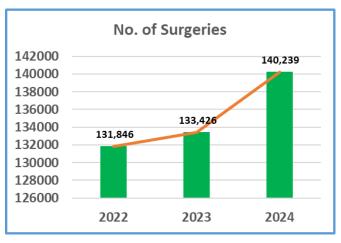


1,406,870

Examinations



Patient Treated 1450000 1,406,870 1400000 1,363,325 1350000 1300000 1250000 1,213,326 1200000 1150000 1100000 2022 2023 2024







Surgeries

Surgical Center at Fikkal

Transportation from hilly and mountainous regions to urban hospitals poses significant challenges, with poor road conditions making access to essential medical services even harder for many. To address this, a new cataract surgical center has been established at Fikkal, Suryodaya Municipality of Ilam district. It will address the growing need for eye care services, particularly for cataract patients. The center equipped with modern surgical facilities, aims to provide high quality cataract surgeries to communities that previously had limited access to eye care. The center will not only perform surgeries but also offer diagnostic services, eye screening, and post-operative care, ensuring comprehensive treatment for patients. This new center will improve access to cataract surgery, enhance the quality of life and reduce the burden of preventable blindness in the region. The center was inaugurated on February 9, 2024, by Ran Bahadur Rai, the Mayor of Suryodaya Municipality. Total 2,486 people received eye and ear services including 113 eye surgeries.





ISO 9001:2015 & ISO 14001:2015

SCEH is the first eye hospital in Madhesh Province which has been awarded ISO 9001:2015 & ISO 14001:2015 in the year for its quality services & for promoting effective environmental management systems. BEH has also received the certificate in 2020.









Teleophthalmology Service

To enhance eye care accessibility in remote and hilly areas of Koshi and Madhesh Province, Teleophtal-mology service has been started at 15 Eye Care Center. The programme includes primary care, expert consultation and training. This initiative utilizes tele medicine technology to facilitate remote consultations and early detection of eye diseases such as Diabetic retinopathy, Glaucoma, and others without requiring patients to travel long distance. This will reduce healthcare cost and carbon emission, contributing to environmental sustainability. The program aligns with the UN resolution recognizing as part of Universal Health Coverage and supports several Sustainable Development Goals (SDGs). The program is supported by the Noor Dubai Foundation. The program was formally inaugurated on 9th July, 2024 at Kathmandu on presence of Dr. Manal Taryam, CEO of the Noor Dubai Foundation, Chief guest Dr. Roshan Pokhrel, Secretary at the Ministry of Health and Population, Ambassador of the UAE Abdulla Al-Shamsi and other delegates from NNJS.



RAAB Survey Dissemination

The Rapid Assessment of Avoidable Blindness (RAAB) is a standardized, population based survey conducted in all provinces of Nepal in 2017-2021 AD. The main objective of the RAAB survey was to assess the magnitude of blindness and visual impairment, its causes and the impact of existing eye care services in Koshi and Madhesh Province, Nepal. The report of RAAB Survey of Koshi Province has been disseminated on the presence of chief guest of Koshi Province Honorable Chief Minister Hikmat Kumar Karki and other stakeholders in Biratnagar. Similarly, Madhesh Province RAAB dissemination program was held in presence of Honorable Chief Minister Satish Kumar Singh as the chief guest along with major stakeholders in Bardibas.

The key RAAB findings of Koshi Province: The crude prevalence of bilateral blindness from all causes among people aged 50 years and above was 1.0 % (95% CI 0.7-1.3). The age- and sex-adjusted prevalence of blindness was 0.8% (95%CI 0.5-1.1). Blindness and vision impairment for all causes was found among 109,904 people and on 325,117 eyes. The major barriers of cataract surgery were cost, local reason, need not felt. Cataract as the leading causes of blindness, posterior segment diseases, uncorrected refractive error, diabetic retinopathy and functional low vision are major issues identified.





The key RAAB findings of Madhesh Province: The crude prevalence of bilateral blindness from all causes among people aged 50 years and above was 1.5 % (95% CI 1.1-1.9). The age- and sex-adjusted prevalence of blindness was 1.3 % (95%CI 1.0-1.8). Blindness and vision impairment for all causes was found among 229,237 people and on 568,687 eyes. The major barriers of cataract surgery were need not felt, fear and cost. Cataracts as the leading causes of blindness, posterior segment diseases, uncorrected refractive error, diabetic retinopathy and functional low vision are major issues identified.

SURGERIES

Cataract:	87,805
Sutureless ECCE/IOL (SICS):	45,264
On children:	1,407
Phaco with IOL:	39,278
Other lens removal procedures:	1,856
Glaucoma:	4,566
Trabeculectomy:	292
Combined (Cat&Trabeculectomy):	535
Trans scleral cyclo photocoagulation	
Nd. YAG iridotomy:	3,499
Surgical PI & other:	72
Corneo-Scleral Surgical Procedures	
Keratoplasty:	355
Amniotic Membrane Graft (AMG):	136
Corneo Scleral Repair:	702
Pterygium:	4,551
Corneal Cross Linking:	122
LASIK:	46
Other Corneal Procedures:	1,168
Vitreo-Retinal Surgery:	13,174
Pars plana Vitrectomy:	1,645
Scleral Buckling:	447
Intravitreal Injections:	941
Inj. Avastin: Others:	8,596
	1,545
Oculoplasty Procedures:	3,443 2,319
Dacryocystoctomy:	602
Dacyrocystectomy: Entropion / Ectropion:	341
Evisceration / Enucleation:	478
Ptosis:	80
Other oculoplasty procedures:	953
Laser procedures:	11,943
Retinal Laser:	6,146
Nd. YAG capsulotomy:	5,797
Squint:	267
Others:	3,443
SUB TOTAL:	133,051
ENT Surgeries:	7,188
C.MTplasty:	13
MRM:	101
Myringoplasty:	945
Nose Surgery:	18
Head/Neck Surgery:	2
Minor:	6,109
TOTAL:	140,239

Surgeries:

SCEH, Lahan & its Surgical Centers: 60,043
BEH, Biratnagar & its Surgical Centers: 72,226
11 Cat.Surg.Camps: 782

SUB TOTAL: 133,051

Ear Department, SCEH: 5,656
Ear Department, BEH: 1,532

GRAND TOTAL: 140,239



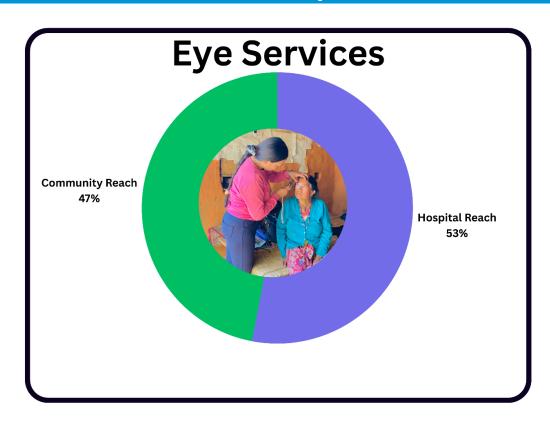
OUTPATIENTS

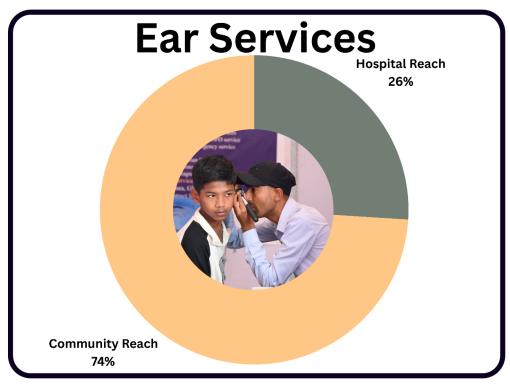
OUTPATIENT VISIT AT HOSPITALS: EYE		
SCEH, Lahan:	252,103	
Biratnagar Eye Hospital:	335,091	
COMMUNITY SERVICES: EYE		
37 Eye Care Centers:	219,397	
Screening Camps' Patients:	83,789	
COR Household:	79,663	
School Screening:	79,608	
District project:	42,679	
Surg. Camps' Outpatients:	5,135	
EYE SUB TOTAL	1,097,465	
OUTPATIENT VISIT AT HOSPITALS: EAR		
OUTPATIENT VISIT AT HOSPIT	ALS: EAR	
OUTPATIENT VISIT AT HOSPIT. SCEH, ENT Dept.	ALS: EAR 36,014	
SCEH, ENT Dept.	36,014	
SCEH, ENT Dept. BEH, ENT Dept.	36,014	
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SCEH, ENT Dept. BEH, ENT Dept. COMMUNITY SERVICES: EAR Ear OPD in ECCs: Ear Screening Camp Patients: Ear School Screening: District Project:	36,014 43,874 38,016 883 77,301 42,779	
SCEH, ENT Dept. BEH, ENT Dept. COMMUNITY SERVICES: EAR Ear OPD in ECCs: Ear Screening Camp Patients: Ear School Screening: District Project: COR Household:	36,014 43,874 38,016 883 77,301 42,779 70,538	





Our Reach in the year 2024









REACH From 1983-2024





6,345,135Community Care



13,179,538
Eye Patient Treated



2,340,398 Eye Surgeries



1,851,812
Cataract Surgeries



11,895
Eye Surgeries at Hill



1,510,853
Ear Patient Treated



27,282
Ear Surgeries Done

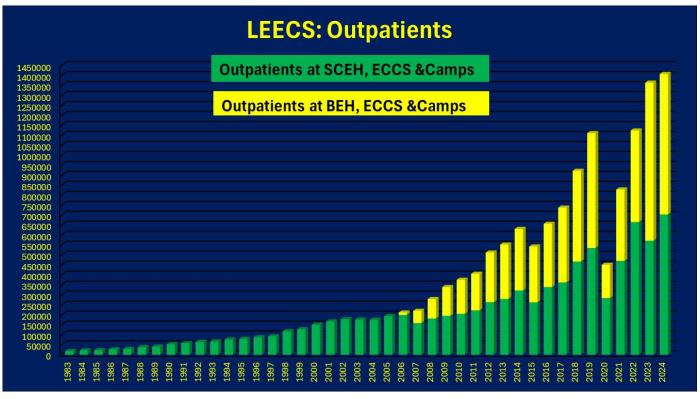


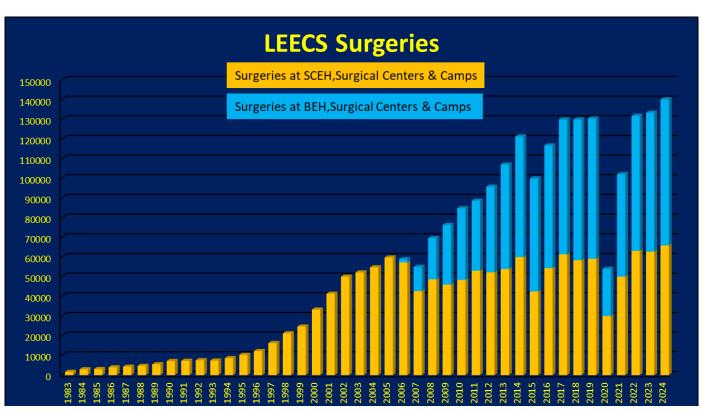
189
Publications





LEECS Outpatients & Surgeries Performed From 1983-2024 (42 Years)









SPECIAL SERVICES at LEECS

Cataract Services

Cataract is still the commonest cause of reversible blindness in developing countries like Nepal. Increased life expectancy, increased number of systemic diseases causing cataract and low uptake of cataract surgical services are contributing to increasing number of untreated cataract patients. A total of 87,805 cataract surgery done out of which 39,278(45%) surgeries were performed through modern cataract surgery method Phacoemulsification. There has been a noticeable increase in phacoemulsification surgeries compared to the previous year. Cataract surgery was 63% out of total eye surgeries. Phacoemulsification with Mono-Focal, EDOF, Multi-Focal, Toric, Multifocal Toric, Tri-Focal lenses are available and regular procedures at both hospitals.



87,805

39,278 (45%)

Cornea Department

Both hospitals are providing comprehensive care for a wide range of corneal condition, including corneal transplantation and management of complex cornea infections. A total of 50,955 patients were examined as outpatient and 7,080 corneal surgeries were performed, including 355 corneal transplantation surgeries {TPK:255, PK: 81; DSEK:16; DALK: 3}, 136 Amniotic Membrane transplantation with autograft, 2,967 Pterygium surgeries along with 1,249 modified PERFECT technique. 122 collagen crosslinking, 702 corneal and scleral repairs whereas 775 received corneal topography, 1,193 specular Microscopy, and 62 confocal microscopy services. Autologous serum eye drop has been started at SCEH to treat severe dry eyes.

To further enhance in endothelial transplants, Dr. Manish Pandey participated in DMEK workshop organized by Dr. Shroff's Charity Eye Hospital, New Delhi.

Clinical Cornea Care training has been provided to 40 optometrists and ophthalmic assistants working at hospital & ECCs with support from Cure Blindness.

Cornea collection strengthening workshop/Eye donation collaboration program with various stakeholders including general hospitals, government bodies, and social workers were organized at Biratnagar. Two candidates have received eye bank technician cum eye donation counsellor training from Nepal Eye Bank, TIO.

50,955

7,080 Corneal Surgeries

1,249







Contact Lens:

The contact lens department specialized in providing vision correction solutions through a wide range of contact lenses, including soft, rigid and specialty lenses.

A total of 1,045 contact lens patients (553 males, & 492 females) with different eye disorders mostly Keratoconus, Myopia, corneal scar and other form of refractive error received contact lens service from the contact lens department. 465 Soft Spherical, 14 soft toric contact lens, 93 Prosthetic contact lens, 63 RGP (Rigid Gas Permeable), 19 Rose K2, 70 Scleral and Orthokeratology, and 724 contact lenses were dispensed to patients. Overall, it plays a crucial role in enhancing patient vision and providing convenient, comfortable, alternative to eye glasses.





Refractive Surgery Department:

The refractive Surgery Department of BEH started in 2019. It has been further strengthened and running smoothly. LASIK is a popular surgical procedure used to correct refractive vision problem. 46 patients received LASIK and PRK (Photo Refractive Keratectomy) laser surgeries which has been increased than last year. Dr. Pragya Luitel has received LASIK surgery training from Dr. Shroff's Charity Eye Hospital, New Delhi.









Paediatric Ophthalmology and Strabismus Department

Both eye hospital's paediatric department is playing a vital role in safeguarding children's vision by offering specialized care with highly qualified and experienced team of pediatric ophthalmologist, anesthesiologist, ophthalmic assistant, optometrists, pediatric orthoptics and counselors trained in pediatric counselling with child-friendly environment enhancing the growth of the children by providing a multifunctional and comfortable space for children.

In the Paediatric Ophthalmology and Strabismus Department of both eye hospitals, 61,740 children were examined.4,739 children underwent surgery at both eye hospitals including 1,407 paediatric cataracts, 267 squint surgeries out of which 92 were children.

Similarly, 4,630 patients with neuro-ophthalmology problems were examined and treated which saved their time to receive early treatments.

Dr. Pawan has undergone through one week observational training in Neuro-ophthalmology at LVPEI.

61,740
Children Examined

4,739
Surgeries on Children

1,407
Paediatric Cataract







Myopia Clinic:

Myopia, often beginning in childhood and progressing through teenage years, is a growing global concern. By 2050, half of the world's population is projected to be myopic, with 1 billion at risk of severe complications leading to vision loss. In recognition of this growing challenge, BEH has started separate myopia clinic in 2021. Similarly, SCEH has also started separate myopia clinic since Sept. 2024. The clinic is equipped with state-of-the-art diagnostic technologies, including the Open Field Auto Refractor for assessing peripheral refraction and myopia progression risks, and the IOL Master 700 for precise measurement of axial length—an essential parameter in monitoring progressive myopia. The clinic offers a comprehensive, evidence-based approach to myopia management. Treatment modalities include pharmacological interventions, such as low-dose atropine eye drops; optical treatments, including orthokeratology (Ortho-K) lenses and peripheral defocus spectacles; and preventive strategies focused on environmental and lifestyle modifications. These modifications emphasize increased outdoor activities, reduced screen time, and improved visual ergonomics to mitigate risk factors for myopia progression. A total of 978 children have been examined and treated.







Orthoptic Department:

The Orthoptic Department offers specialized services for the evaluation and treatment of non-strabismic binocular vision disorders, accommodative disorders, squint and eye movement disorders. The department serves as a referral unit for managing various conditions related to vergence, accommodation, and strabismus, as well as for the evaluation of diplopia, Hess charting, and cycloplegic refraction. A total of 5,289 patients received services from the unit, with 4701 orthoptic evaluations and 783 strabismus evaluations conducted. In addition, vision therapy exercise kits were explained and



dispensed to patients, and office-based vision therapy (VTS), aperture rule was provided as part of their treatment plan. The department plays a vital role in supporting patients with binocular vision disorders through comprehensive assessments and tailored therapy.

Vitreo-Retinal Department

The retina department has demonstrated significant progress over the past year, marked by advancement in patient care, diagnostics and treatment outcome with specialized team of experienced retina surgeons, optometrists and retina counsellor. The department provided service to high volume of cases, including diabetic retinopathy, age related macular degeneration, retinal detachments and other complex retinal disorder. In the department of both eye hospitals, 51,847 patients were examined, 13,174 patients underwent VR procedures out of which 3,011 were Vitreo-Retinal surgeries, 8,596 lnj. Avastin, 941 other Intra-vitreal Injections, and 626 other surgeries. 6,146 received retinal laser, 26,617 received B-scan services, 1,365 received FFA services and 20,106 received OCT services. Dr. Abhinash Kumar Jha and Dr. Nistha Shrestha have completed 2 years Vireo-Retina fellowship.

Dr. Ashma Manandhar received one month training on Uvea at LVPEI, Hyderabad.

51,847 Examinations

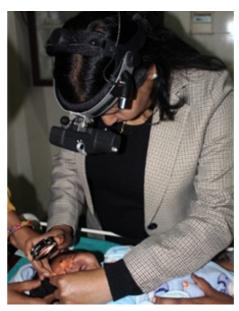
13,174 VR Procedures

6,146
Retinal Laser









ROP- Retinopathy of Prematurity

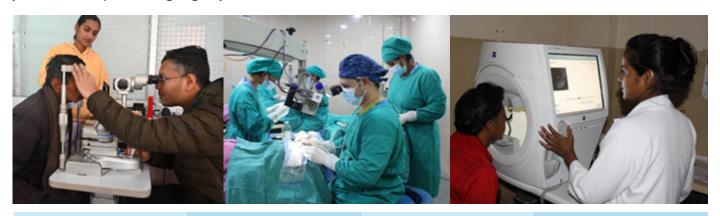
ROP screening started since Nov 2020 has made remarkable strides over the past years in the early detection, timely intervention and management of ROP in premature infants born before 34 weeks of gestation and/or weighing 1750 grams or less. BEH has been conducting extensive and regular screening programs across neonatal intensive care units (NICU) at Biratnagar Metropolitan City.

In 2024, 486 babies (267boys, 219 girls) were screened several times in NICU and Biratnagar Eye Hospital ROP clinic. ROP was detected in 181 babies. 21 babies were treated with laser therapy and 19 babies with Inj. Avastin.

Glaucoma Department

Both hospital glaucoma departments have achieved significant milestones over the past years, focusing on early detection, advance treatment and comprehensive patient care with highly qualified, specialized teams. The department successfully managed a diverse range of glaucoma cases, including primary open angle, angle closure, and secondary glaucoma with a strong emphasis on early diagnosis through advanced imaging technologies like OCT, Visual Field, and others. 40,155 glaucoma patients were examined among them Primary open angle glaucoma was the commonest.. A total of 4,566 glaucoma surgeries (Trab:292, Combined:535) were performed including 67 children, 7,292 patients underwent computerized Visual Field Testing and 3,499 received Nd. YAG Iridotomy service.

Dr. Uday Chandra Prakash joined as glaucoma consultant at SCEH from July 2024 after completing one-year fellowship from Tilganga eye institute.



40,155 Examinations **4,566**Surgeries

7,292 Visual Field-Testing 3,499 Nd. Yag Iridotomy

Orbit, Plastic and Lacrimal (OPAL) Department

Both hospitals oculoplasty departments have made significant strides this year in providing specialized care for patients with eyelid, orbital and tear duct disorders.

In both eye hospital, the OPAL Department examined 23,609 patients and 4,773 surgeries were performed. Among them, 2,319 DCR including 296 Endoscopic DCR, 80 Ptosis, 65 Injection Botox, 409 Evisceration





with orbital implants, 69 Enucleation; and other different types of Orbitotomy, Lid reconstruction, various therapeutic and cosmetic eyelid surgeries such as Blephareplasty and orbital tumor.

In the Ocular Prosthesis Unit, 480 patients received artificial eyes and among them, 49 were custom made which has improved quality of life by restoring normal appearance to the face.





23,609Examinations

4,773Surgeries

2,319

296 Endoscopic DCR

Low Vision & Rehabilitation Department:

The Nepal Blindness Survey of 1981 indicated that the prevalence of blindness in Nepal was 0.84% and it is estimated that prevalence of low vision is 1% of total population. While people with low vision cannot completely restore their sight or reverse vision loss, low vision management can significantly enhance their quality of life, helping individuals adjust to daily activities with limited vision. This is accomplished through comprehensive low vision services provided by both hospitals, which offer both optical and non-optical solutions, as well as electronic devices. A total of 704 patients including 140 children with Low-Vision were assessed. Special Low-Vision devices were dispensed to 269 visually impaired patients for improving their vision. Total 240 incurable blind patients underwent counseling as well as orientation and mobility training to move independently, and 370 patients with low vision were oriented on environmental modification such as kitchen, toilet, and different lighting conditions to make their basic living activities easy.

704
Examinations

269
Visually Impaired

240 Incurable Blind







Physician Consultation Services

The physician services at our eye hospitals have played a crucial role in delivering comprehensive eye care to patients to manage the pre-operative, post-operative and other eye patients with systemic conditions like diabetes mellitus, hypertension, heart disease etc.

A total of 13,412 patients with different medical conditions were examined and treated. This has helped to improve overall healthcare coordination, enhances patient outcomes and promote preventive eye care.



Optical Unit

The optical unit of both hospitals of LEECS features highly skilled team and updated equipment dedicated to delivering affordable, high-quality eyewear. Recent advancements highlight enhanced counselling for myopia management, offering personalized advice on lifestyle adjustments and lens options for children. The treatment primarily utilizes DIMS (Defocus Incorporated Multiple Segments) technology on spectacle lenses, a proven method for effectively controlling myopia progression. A more detailed pre-dispensing process now ensures precise facial and frame measurements, allowing customized lenses to be tailored to individual parameters for optimal comfort, minimizing common adjustment complaints. The pediatric department creates a child-friendly environment, offering colorful, durable frames paired with premium lenses, simplifying the selection process and enhancing the overall experience for children. Additionally, the lens processing unit enables us the availability of aphakic glasses with additional power, benefiting children post-surgery or reguiring therapeutic lenses for vision exercises. This year 135,703 patients have received spectacles from SCEH and BEH optical dispensing units.





Ophthalmic Pathology and Laboratory Medicine at BEH

Over the past years, Ophthalmic Pathology and Laboratory Medicine department has made significant impact on diagnostic accuracy, research and patient care. The department provided services to 60,035 patients including Biochemistry, Haematology, Microbiology and Histopathology.

Ocular Microbiology Laboratory at SCEH

The Ocular Microbiology department has played a crucial role in diagnosing and managing infectious eye disease over the past years. It was established in collaboration with the London School of Hygiene and Tropical Medicine in 2019. The laboratory is well equipped with a Fluorescent Microscope, Bacteriology (aerobic and non-aerobic) and mycology incubator, -780c ultra-low temperature Freezer, Biological Safety Cabinet II and a digital bench top Autoclave and others including full time microbiologists, medical lab technologist and others. It has performed 54,296 lab test.





Integrated ENT Service

LEECS has integrated Ear Care Services at Eye Hospitals, Eye Care Centers, School Screening, Screening camps, District Project and Door-to-Door visit programs to diagnose ear problem since 2013.

The department has provided comprehensive diagnostic and treatment services for a wide range of auditory conditions and ear diseases. A total of 309,405 patients with various ENT problems were examined out of which 79,888 were examined at the hospitals and 229,517 in outreach activities (ECCs, School Screening, Screening camps, District Project and Door to Door visit). Diagnostic capabilities have been enhanced with advanced audiological testing and endoscopic examinations ensuring early detection and effective management of ear diseases. 15,434 Pure Tone Audiometry (PTA) examinations and 7,188 surgeries were performed; and 517 patients with hearing loss received hearing aids whereas 1,104 patients received nasal evaluation service for their DCR and DCT surgeries.

3,09,405

7,188
ENT Surgeries

15,434 PTA Examination



Improving and Strengthening Biomedical Waste Management (Zero Waste) System

SCEH & BEH hospitals have established proper biomedical waste management system and has been able to achieve zero waste concept. Sagarmatha Choudhary Eye Hospital, Lahan has established system to achieve zero waste, setting a benchmark in sustainable healthcare practices in this year. The hospital strategy includes scientifically driven waste segregation at source along with efficient methods for transportation, treatment and disposal. By adopting innovative approaches and adhering to the highest standards, SCEH has successfully reduced its environment impact, improved and strengthen biomedical waste management system and has been accredited by ISO 14001:2015 to promote effective environmental management systems. Similarly, Biratnagar Eye Hospital has been also achieved zero waste concept since 2019 and accredited by ISO 14001:2015.







REACHING THE UNREACHED: COMMUNITY PROGRAMS

School Screening: Vision For Kids

Vision is closely linked to a child's ability to learn. About 80% of what children learn is through vision input. Children with uncorrected vision problems may struggle with reading, writing and social integration, negatively impacting their educational progress. Hearing is also critical to a child's ability to develop speech and language skills. Undetected hearing problems can delay speech development, leading to difficulty in learning to speak clearly and understand language. Therefore, both hospitals conducted school children eye and ear screening program to identify vision and hearing problems at an early stage, ensuring timely intervention and improved academic performance. Children aged between (3-18) years of age are examined in their school by Ophthalmic Assistant and other paramedical staffs. They performed eye and ear examination, refraction and prescribed glasses. 79,608 children received eye screening among them 922 received spectacles, 1,139 received medicines, and 11 children were referred to base hospital for eye



surgery. Likewise, 1,593 teachers and community workers were oriented on ocular diseases occurring in children. Similarly,77,301 children ear screening was done, out of which 1,690 received ear medicines.





Peek Vision Program:

LEECS' eye hospitals have implemented Peek Vision Program in 30 rural & municipalities of Mahottari, Dhanusha, Sarlahi, Saptari, Sunsari, Morang, llam and Bhojpur districts in association with Peek Vision Limited, UK and CBM Global.

This innovative program utilizes mobile technology (Peek Capture Application) to enable vision tests and efficiently record patient data. The system allows for early detection of eye conditions, facilitating timely referrals and treatment. The peek



vision program sends automated, personalized SMS reminder to patients referred for follow-up, delivered in different language based on their ethnicity, to encourage them to visit the Eye Care Center. Through





peek screening total of 167,125 patients including COR, School screening and District Eye Health Program have been screened. Among these, 20,813 (12.5%) have found eye problems, treated locally and/or referred for further treatment at nearby Eye Care Centers. This approach has enhanced referral rates and improved access to eye care services.

Community Outreach and Rehabilitation Program (COR):

The door-to-door eye & ear screening program aimed to provide accessible vision and hearing care to indigenous groups, marginalized population, elderly, woman, children, and person with disabilities. A team of trained health care professionals conducted home visits, offering comprehensive eye & ear screening, early detection of vision impairments, and referrals for further treatment. This initiative helped to identify uncorrected refractive error, cataracts, and other eye conditions, ensuring timely intervention. Through community engagement and awareness campaigns, the program enhances eye and ear health accessibility, reaching and screening 1,50,201 people in the year in Dhanushadham, Jaleshwor, Bhojpur, Rangeli Municipalities, Sunbarshi and Kerabari Rural Municipalities. A total 11,622 people referred for further treatment where 2,144 received medicine and 860 people received spectacles. Persons identified with visual impairment and ear problem were referred to the nearest ECC or base hospitals for further treatment and surgery.



Services through community Eye and Ear Care Center:

Eye & Ear Care Center has continued to provide accessible services to poorest and the most unreachable community people to improve vision and hearing health and ensuring that quality care is available to

all. Full-Time Ophthalmic Assistant/Optometrist provides wide range of eye and ear care services as well as referrals for patients who need specialized care. Number of eye care center has been increased to 37.

219,397 eye and 38,016 ear patients received services. 2 new Eye Care Centers at Ilam & Bhojpur district (Fikkal Eye & Ear Care and Dingla) has been established in Partnership with the local municipality.









Surgical Eye Camps:

Surgical camps have performed eye surgery in the hills in a well-setup operation theater prepared inside the premises of government hospitals taking all aseptic precautions. LEECS' hospitals have conducted 11 surgical camps in hilly and mountain areas (Diktel- 1, Lalitpur-1, Bhojpur-3, Terhathum-2, Ilam-3 and Panchthar-1). A total of 5,135 patients were examined and treated where 782 underwent surgery with the majority being cataract surgery 673. These camps have significantly improved vision, enabling individuals to regain independence and improve their quality of life.

Follow-up eye examination of operated patients were done at the campsite and eye care centers.





Cataract Screening Camp:

LEECS' eye hospitals conducted 206 Cataract Screening Camps in rural areas. A total of 42,040 patients received eye examinations & treatment at the community level where 10,391 patients were brought to SCEH and BEH for surgery and were operated free of cost. The positive response from the community highlights the impact of such programs in preventing vision impairment and enhancing quality of life.





District Eye Health Program:

"Sunaulo Bihani", the District Eye Health Program, is an effective screening model with significant outreach services implemented to screen the targeted population for early identification and treatment to prevent the complication of diseases. The program supports in strengthening health service by integrating pri-





mary eye care service at health posts level and identify the possible eye diseases among the risk groups. A specialized ophthalmic team provides thorough eye and ear examinations to individuals aged 40 and older at health posts and school children in their educational institutions, while also fostering awareness among local leaders and health workers through collaboration with local governments. Operating in the districts of Ilam and Sarlahi, the program has successfully screened 85,158 individuals along with 64,294 schoolchildren, and has offered awareness training to 202 local leaders and health workers. Building on the successes of "Sunaulo Bihani," a new initiative called "Swastha Ankha Sundar Sansar" has been launched to further engage communities, stake-



holders, and local leaders, while increasing awareness of eye and ear health among the general public. This new model has been launched in Ilam and is set to expand to Bhojpur and Terhathum in the coming months.

EYE/EAR HEALTH EDUCATION:

Community awareness programs on Eye and Ear health:

Strengthening health promotion and education in eye and ear care is vital, as most vision and hearing impairments are preventable with early detection and timely management. To promote better eye and ear health, series of awareness program has been conducted by broadcasting jingles on various local radio & FMs about eye problems including myopia, eye infection, cataract, diabetic retinopathy in local languages. Posters, pamphlets, handbills of different eye and ear diseases are distributed.

Hospitals provided primary eye and ear care training to 142 Government Health Centers Health workers, 279 Female Community Health Volunteers (FCHVs), 93 drug-retailers and, 84 traditional healers to create awareness and strengthen the referral mechanism. These sessions educated the community on common vision and hearing problem, preventive care, and the importance of early diagnosis.





FREE and Subsidized Services to Patients

Several screening and surgical camps were conducted and identified 11,173 patients who underwent free surgery at the base hospitals. Patients from eye camps and poor economic backgrounds arriving directly at SCEH and BEH received support with the worth of NPR 43,986,554 (USD 323,430) in their examination, surgery, spectacles, medicine, transportation & food cost. Out of 87,805 cataract surgeries, 13.5% were done on a subsidized package of NPR 1200 (approx. USD 9). The subsidy aimed to reduce the financial burden on low-income families, ensuring they receive timely and quality care.

1,173 NPR 43,986,554(USD 323,430)

subsidized package of NPR 1200





TRAINING & DEVELOPMENT



Postgraduate MD Ophthalmology with National Academy of Medical Science (NAMS):

3 MD Ophthalmologists have completed their study and presently 5 are enrolled.



Bachelor in Optometry and Vision Science:

14 BOVS students have completed their study and presently 31 are enrolled.



Diploma in Ophthalmic Science Course at Lahan School of Health Science (DOS):

40 students enrolled in the year 2024



Anterior Segment Fellowship:

8 Ophthalmologists have completed their 2-year anterior segment fellowship from SCEH and BEH. Presently 16 ophthalmologists are undergoing two years Anterior Segment Fellowship at SCEH and BEH.



Glaucoma Fellowship:

2 Ophthalmologists have completed Glaucoma Fellowship at BEH.



Vitreo-Retinal Fellowship:

2 Ophthalmologists have completed and 5 Ophthalmologists are undergoing a 15month Vitreo-Retinal Fellowship at BEH.



Pediatric Ophthalmology and Strabismus Fellowship:

1 Ophthalmologist has completed and 1 ophthalmologist is undergoing 1-year Pediatric Ophthalmology and Strabismus Fellowship at BEH and SCEH.





WORKSHOP AND CONFERENCES AT LEECS

National Workshop on Eye Health Education:



Nepal Netra Jyoti Sangh/ Lahan Eye & Ear Care System organized Nepal's first national-level workshop on Emerging trend and way forward in eye health education with the support of CBM in Kathmandu on 17th June 2024. There were 71 participants including 16 eye hospitals, government officials, I/NGOs where eye health education practices, challeng-

es, and priorities were discussed. A task force has been formed to work on updating current eye health education materials used at eye hospitals and developing new types of eye health education materials for emerging eye diseases.

CME on Diabetic Retinopathy:

Diabetic Retinopathy workshop was conducted by both hospitals with the participation of various Endocrinologist, physicians, patients with their attendant to enhance awareness among doctors and increase timely referral. The session fostered interactive discussions, case-based learning to



improve patients outcome. Participants gained valuable insights, reinforcing the need of multidisciplinary approaches in diabetic retinopathy management. There were 160 participants participated in the event.

CME on ROP

CME on Retinopathy of Prematurity was successfully conducted by both hospitals in the presence of various Neonatologists and Paediatricians of Biratnagar & Janakpur. There were 109 participants participated in the event.







INCLUSIVE SERVICES

The inclusive service initiative focused on providing accessible and equitable care for all, including marginalized communities, person with disabilities, and the elderly. LEECS working for prevention of possible blindness and deafness is committed to have gender and disability inclusive services. LEECS ensures protection of children and other people in vulnerable circumstances from both intentional and unintentional harm. Different orientation program has been organized to sensitize its staffs on these parameters.

Total 145 (Male-81, Female- 64) staffs were oriented on disability inclusive eye and ear services and 123 (Male-61, Female-62) on gender mainstreaming and same number (114 staffs) were oriented on safeguarding.

Likewise, to consider inclusive response during any kind of disaster, LEECS oriented 197 (Male-128, Female-69) staffs in inclusive disaster risk reduction. Thus, capacitating staffs on cross cutting areas of gender, disability and inclusion in disaster have enhanced effective service delivery and ensured inclusive environment to all kind of people receiving services.





HUMAN RESOURCE AT LEECS

1002 Members Including

43	Ophthalmologists	35	Optometrists
02	ENT Specialists	98	Ophthalmic Assistants
03	Anaesthesiologists	03	Anaesthetic Assistants
02	MD Physicians	15	Pharmacy Assistants
01	Pathologist	11	Staff Nurses
02	Microbiologists	02	Health Assistants
47	Administrative staff	124	Eye Health Workers
614 Other Supporting Staff			





RESEARCH & PUBLICATIONS

LEECS has established research department since 2017 with full-time research officer, part-time data analyst, along with research advisors. An Institutional Review Committee (IRC) at BEH, approved by the Nepal Health Research Council (NHRC), has been operational since 2018. This year, 13 research papers have been successfully published in national and international journals, with an additional 17 research projects currently in progress, all approved by the IRC, BEH.

Research Dissemination Workshop:

To share research findings and experiences from research projects in an effort to foster intellectual debate and interaction among the participants, research dissemination workshops were conducted at both hospitals where 26 research papers were presented. Altogether 92 participants including ophthalmologists, optometrists, ophthalmic assistants and other health professionals participated.



14 Publications of 2024:

Outcome of cataract surgery among eye camp patients of Eastern Nepal:

Rajiv Ranjan Karn, Pankaj Ray Adhikari, Sanjay Kumar Singh, Abhishek Roshan, Sudhir Kumar Thakur.

Journal of Nobel Medical College, 13(1), 20-24. https://doi.org/10.3126/jonmc.v13i1.68097

Evaluation of Self-vision Assessment Charts in Schools of Eastern Nepal: A Multi Method Study:
Archana Shrestha, Sudhir Kumar Thakur, Abhishek Roshan, Sanjay Kumar Singh, Archana
Pokhrel, Apekshya Bohara, Lisasha Poudel, Chanda Thakur, Asmita Adhikari, Priyanka Timsina,

Yunika Acharya, Rajiv Ranjan Karn JNMA, DOI: 10.31729/jnma.8796

Role of traditional healers in the management of microbial keratitis in eastern Nepal:

Sandip Das Sanyam, Reena Yadav, Abeer H. A. Mohamed Ahmed, Simon Arunga, Astrid Leck, David Macleod, Abhishek Roshan, Sanjay K. Singh, Sailesh K. Mishra, Jeremy J. Hoffman, Matthew J. Burton, Tara Mtuy

Wellcome Open Res. DOI: 10.12688/wellcomeopenres.21241.2

Managing microbial keratitis in resource-limited settings:

Hoffman, J., Yadav, R., Ebong, A., Arunga, S. and Leck, A. Community Eye Health Journal. DOI: 10.12688/wellcomeopenres.21241.2

Educating community members in Nepal about microbial keratitis: Sanyam S Das

Community Eye Health Journal. https://cehjournal.org/articles/821





Diagnosing microbial keratitis in different settings:

Astrid Leck, Reena Yadav, Abel Ebong, Simon Arunga, Jeremy Hoffman Community Eye Health Journal. https://cehjournal.org/articles/818

Profile and Visual outcome of patients having keratoconus attending tertiary eye hospital, Nepal:

Pankaj Ray Adhikari, Nirmala Chauhdary, Rajiv Ranjan Karn Journal of Nobel Medical College. DOI: 10.3126/jonmc.v13i1.68100

Prevalence of ocular morbidity among industrial workers of Eastern Nepal:

Pradeep Kumar Patel, Sanjay Sah, Pankaj Ray Adhikari, Rajiv Ranjan Karn. IHOPE Journal of Ophthalmology, DOI: 10.25259/IHOPEJO_25_2023

Ocular Firework Injuries among Patients Presented to the Emergency Department During Festival Season in a Tertiary Eye Hospital:

Ashma Manandhar, Tinku Mukharjee, Rajiv Ranjan Karn JNMA. DOI: https://doi.org/10.54530/jcmc.1367

Visual and Surgical Outcomes of Outreach Cataract Surgeries in Ilam District of Nepal: An Observational Study:

Pragya Luital, Manish Pandey, Rajiv Ranjan Karn, Mahesh Kumar Dev, Lily Rajbanshi, Rakshya Panta Sitoula.

JNMA. DOI: 10.31729/jnma.8798

Rare presentation of foveal hypoplasia: A case report :

Ashma Manandhar

Journal of Chitwan Medical College. DOI: https://doi.org/10.54530/jcmc.1546

Retinal Nerve Fiber Layer Thickness (RNFL) Measurements in Nepalese Population of Eastern Region by Optical Coherence Tomography:

Shankar Thakur, Pradip Kumar Patel Nepal Medical Journal. DOI: https://DOI.org/10.37080/nmj.200

Clinical Outcomes and Visual Performance of Multifocal Intraocular Lenses Following Phacoemulsification:

A Retrospective Study

Sanjay Kumar Singh, Jayshree Mandal, Sandip Das Sanyam, Bipin Bista, Sunu Dulal DOI: https://doi.org/10.46405/ejms.v6i1.

Investigating the Causes of Spectacle Non-Tolerance in Patients at a Tertiary Eye Hospital in Nepal Tinku Mukherjee, Sanjay Kumar Sah, Sushil Kumar Sah, Pankaj Ray Adhikarii, Pradeep Kumar Patel

Journal of Ophthalmic and Optometric Sciences. Volume 8, Number 2, Spring 2024.





History













Under leadership of Secretary General Dr. Ram Prasad Pokhrel and Chairmanship of General Ravi Shamsher Ja. Ba. Ra; Nepal Netra Jyoti Sangh (NNJS) was established in late 1978 for hassle-free and facilitative eye treatment of patients. Nepal Netra Jyoti Sangh appealed to different international unions and organizations to support them to eliminate blindness in Nepal. Christoffel Blindenmission, CBM started collaboration with Social Welfare Council and Nepal Netra Jyoti Sangh after an agreement in December 1982. Dr. Albrecht Hennig from CBM started 12 bedded Eye Care Center from Ram Kumar Sarda Uma Prasad Murarka's Public District Hospital at Lahan in 1983.

As the number of eye patients was increasing day by day, Dr. Hennig realized the need for a separate building for an eye hospital. For this, he began contacting and appealing through the Principal of Pashupati High School Mr. Kameshwor Chaudhary to various social workers of Lahan. As the appeal was for a humanitarian cause, the Chaudhary family at Lahan showed interest and assigned responsibility to Mr. Padma N. Choudhary for discussion and finalization of land donation. Finally, a bilateral agreement was signed by NNJS General Secretary, Dr. Ram Prasad Pokhrel and Mr. P. N. Choudhary on behalf of the donor Chaudhary family. As per the agreement, social workers of Lahan Shree Chhabi Lal Chaudhary, Shree Sarowar Lal Chaudhary and Shree Rabindra Lal Chaudhary have donated land in Lahan and Hardiya for the noble cause.

CBM extended its financial support by constructing 50 beds Eye Hospital on this donated land. The dedication and unselfishness as motivated with social service, Dr. Hennig and his team served the neediest populations through Sagarmatha Choudhary Eye Hospital. The growing trust in services and increased demand in eye care helped establish a 450-bed hospital with highly sound technologies in a short period. This newly constructed building was inaugurated by the then King Birendra Bir Bikram Shah in 1986.

To balance the workload of Sagarmatha Choudhary Eye Hospital and to increase the scope of long-term human resource sustainability, Biratnagar Eye Hospital was established on 13th September 2006 under the leadership of Dr. Sanjay Kumar Singh in a rented building as a branch of SCEH, Lahan. The hospital started from 80 beds expanded to become 300 beds by 2009 to meet the demand of an increasing number of patients. The management of the Hospital and supporting the organization's far-sighted vision, skilled doctors, enthusiastic manpower, and high-tech technology have contributed to its immense success in a short duration of time. With the help of Sagarmatha Choudhary Eye Hospital and supporting organizations like CBM, European Union, Standard Chartered Bank and Internal source, 500 bed high-tech building was constructed in Biratnagar.

This new building was inaugurated on 15th November 2011 by the first president of the democratic republic of Nepal, Hon. Dr. Ram Baran Yadav.





Acknowledgments

On behalf of LEECS, we would like to convey our heartleft gratitude to CBM Global, Australian Aid, London School of Hygiene and Tropical Medicine. SEE international, Peek Vision, Vision for the World, and Noor Dubai Foundation, SEVA foundation, Cureblindness & ORBIS.

We are thankful to Ministry of Health & Population, Social Welfare Council, Ministry of Health, Local Governments for their continuous feedback and support.

We also express our sincere thanks to LV Prasad Eye Institute, Dr. Shroff's Charity Eye Hospital, Aravind Eye Care System, Tilganga Institute of Ophthalmology & Nepal Eye Bank,

All these accomplishments were possible due to strong commitment and support from C-NNJS, LEECS Board, Hospital Mangement Committee of SCEH and BEH, all clinical, administrative and support staffs of hospitals and eye care centers.

We take this opportunity to thank many unnamed people and organization for their constant support to make Lahan Eye & Ear Care System a success.

































Team of Annual Report



Mr. Sudhir Thakur Chief Administrator, LEECS



Dr. Sanjay Kumar SinghMedical Superintendent, SCEH



Dr. Lalit Agarwal Medical Superintendent, BEH



Mr. Abhishek Roshan Hospital Manager, SCEH



Mr. Kumar Prithu Hospital Manager, BEH



Mr. Kishor Basnet IT Officer, BEH



Ms. Rasmita BhattaraiCommunication &
Documentation Associate, LEECS





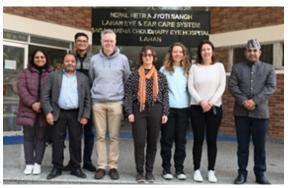




Basic Life Support training to SCEH & BEH staffs



MOU Sign between BEH & Kerabari Rural Municipality for ECC



Matthew Burton, Sarah Oregen of UK Visited to SCEH for Project Review



Visit of Medical Education Commission team to SCEH



Visit of Lalitpur Metropolitan City team to SCEH







Dr. Subhadra Jalali & Anshu Bhargava from LVPEI Hyderbad, India visited BEH



Letter of recognition to SCEH from Lahan Municipality



Koshi Province High Level Committee: Eye Heath



Guest Visit to SCEH for Basic Laser Safety training





Sensitization to Local Leaders of Mai Municipality







Orientation to NNJS Team





Developing Eye Health Education Poster



Doctor's quarter building under construction



Pre testing of eye health education poster in the community (tea stall)







Eye Donation Collaboration Program



Training on Clinical Cornea Care



Master training related to Cornea Clinic Care to hospital staff





'कोशी र मधेश प्रदेशमा टेलि अप्थेल्मोलोजी परियोजना सुरु'



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कोशी प्रदेशमा एक लाख बढीमा आँखाको समस्या





Birat Medical College Teaching Hospital

12 Dec 2024 · 🔇

विराट मेडिकल कलेज टिचिङ हस्पिटल र विराटनगर आँखा अस्पताल बिच आँखा दानका सम्बन्धमा एक सम्झौता भएको छ । Biratnagar Eye Hospital (BEH)



आँखाको ज्योति खोज्दै लहानमा बंगलादेशी

मिथिनेश यादव

संसद प्रापुद ४

सीमावर्ती क्षेत्रका नेपाली सामान्यदेखि जॉटल प्रकृतिका उपचारका निम्ति पनि भारतका विभिन्न सहर धाइरहेका बेला लहानमा स्यापित सगरमाधा चौधरी आँखा अस्पतालले भारतीय मात्र होइन, अन्य विदेशीलाई आकर्षित गरिरहेको छ । बंगलादेशबाट करिब ८ सय किलोमिटर यात्रा गरेर १७ वर्षका मोहम्मद समिम आँखा उपचारका लागि लहान आइपुगे । सस्तोमा आँखाको रामो उपचार हुने सुनेपछि उनी लहानको सगरमाथा चौापरी आँखा अस्पताल आहपुरोका हुन्। उनी भारतका विभिन्न अस्पतालमा उपचार गराएर निराश भइसकेपींड आँखाको ज्योति फर्कने आशामा वहाँ आहपुरोका हुन्।

साममजस्तै औखाको ज्योति फर्कने आशा बोकेर बंगलादेशबाट १८ जना उपचारका लागि आएको अस्पतालका वरिष्ठ प्रबन्धक अभिषेक रोशनले बताए। समिमको बायाँ आँखामा प्राथमिक परीक्षणमा न्तुकोमा र दोस्रो परीक्षणमा मोतीबिन्दु थियो। जसका कारण उनी बाबी आँखाबाट देखदैनथे । भारतको बिधिन्न अस्पतालमा उपचार गराउँदा निको नभएपछि आकन्तहरूबाट जानकारी पाएर लहान आइपुरोको उनले सुनाए। यहाँ मोतियाबिन्द्रको शल्यक्रियापछि उनले बायाँ आँखाबाट पनि ख्याङ्डै देख्न धाले । खुसी हुँदै उनले भने, 'जस्तो सुनेको थिएँ, त्योभन्दा स्तरीय रहेछ यो अस्पताल ।'

आँखाको ज्योति खोजी बंगलादेशबाट लहान आएका मोहम्मद नजरुलको पनि शल्पीकवापछि आँखाको ज्योति फर्कियो। बृद्धावस्थामा सहारा खोजेर हिंडदूल गर्ने बाध्यताबाट पार पाएकी













रासस 🕒 २०८१ जेठ ५ गते १४:१३





विराटनगर आँखा अस्पतालले खोल्यो फिक्कलमा नयाँ आँखा अस्पताल



२०८० माघ २७, ११:४२ बिहान







Awards 2024



Commemorative Order of Community Eye Health Service Award ACOIN PURI 2024 awarded to Mr. Rabindra Lal Chaudhary, Chairman of SCEH



ACOIN 2024 Award to Dr. Mahesh Chaudhary for work in the community ophthalmology



Torch Bearer of Community Ophthalmology ACOIN PURI 2024 Awarded to Mr. Rakesh Kumar Singh, Administrative Officer.



ACOIN 2024 Award to Dr.Lily Rajbhanshi for work in the community ophthalmology





Patient Stories

Every Child Deserves to See the World Clearly







Sifat longed to play and go to school, but her poor vision kept her home. Her family, struggling financially, couldn't afford treatment.

During a Diagnostic Screening Camp by Biratnagar Eye Hospital, Sifat was diagnosed with cataract in both eyes. Initially hesitant due to costs, her family was relieved to learn that the surgery would be completely free.

After successful surgery in both eyes, Sifat's world changed. She now notices everything around her and dreams of becoming a nurse. "I'll give injections just like her!" she says, inspired by the hospital staff.

Her mother, overwhelmed with joy, shares, "It felt like a miracle when she spotted something I had misplaced."

A Journey of Hope and Resilience - Ganga Bahadur Lamichhane





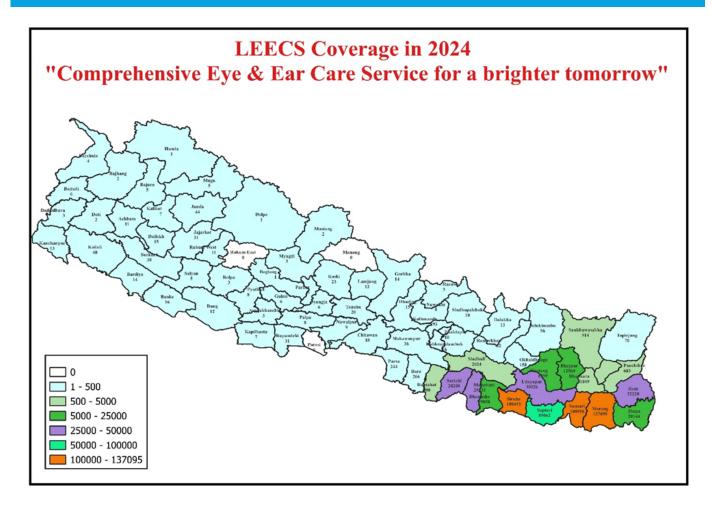
Ganga Bahadur Lamichhane, a 54-year-old from Kerabari-5, Aaptar, was born deaf and later struggled with vision loss due to cataract. His family, despite financial hardship, remained his pillar of support. During a door-to-door screening by Biratnagar Eye Hospital, field staff identified his condition and guided him to a free cataract surgery program.

With successful surgery, his vision improved significantly, restoring his ability to navigate daily life with greater ease. His story highlights the power of timely medical care, community support, and resilience in overcoming life's challenges.





LEECS Centers







Sagarmatha Choudhary Eye Hospital, Lahan-3, Siraha Email: sceh@erec-p.org | Phone No.: 00977-33-563080





Biratnagar Eye Hospital, Rani, Biratnagar-13, Morang Email: beh@erec-p.org | Phone No.: 00977-21-437361



