

O IMPROVING EYE CARE WITH INNOVATIVE TECHNOLOGY

IN 2018, Orbis incorporated the latest in eye health technology to reach more people and improve the quality of our training. With blindness expected to triple in the next 30 years, employing these technological advancements is one of the most impactful ways we can reverse this trend.



"You can only send people and equipment to so many places, but you can go everywhere, an unlimited number of times, with technology."

DR. DANIEL NEELY, INDIANA UNIVERSITY SCHOOL OF MEDICINE & ORBIS VOLUNTEER FACULTY

CYBERSIGHT: REMOVING THE BARRIERS OF GEOGRAPHY

CYBERSIGHT, our online telemedicine platform, allows eye health professionals in remote communities to improve their skills, seek assistance on diagnosis and treatment of their patients and learn from world-leading practitioners. Cybersight works alongside the Flying Eye Hospital, letting ophthalmologists around the world view all the surgeries and lectures that take place on board.



In 2018 alone, Orbis trained more than **5,800** eye health professionals in **165** countries through Cybersight. We also serviced **2,160** patient consultations by connecting doctors across the globe with our expert volunteers for advice on complex cases.

BLINDNESS:A GENDER ISSUE

AROUND THE WORLD, women face gender-related barriers to accessing eye care. Lack of education, limited decision-making power, restricted access to household spending, and traditional gender roles all contribute to the unequal burden of blindness.

In 2018, Orbis made this issue a priority. Our sight-saving work will go even further to ensure equity in eye care for women and girls. Empowering women to access eye care will not only help address gender inequalities, but also have a positive impact on their future, family, community, and the economy as a whole.

25 million

more women and girls live with vision impairment compared to men and boys

70%of people suffering from trachoma are female

2 out of 3 blind children are girls

BUILDING HEALTHY COMMUNITIES TOGETHER

IN GHANA, Orbis partnered with the Queen Mothers – a group of respected and influential women who use their stature to help improve public awareness about eye care.

The Queen Mothers speak during community events on the importance of early diagnosis and treatment for eye issues. With help from Orbis, they provide eye care education, refer people to trained local professionals and debunk harmful traditional practices related to the eye.



PROVIDING THE TOOLS TO BUILD ECONOMIES

ORBIS TOOK PART in a landmark study that revealed how a simple pair of \$2.35 reading glasses can boost workers' productivity and reduce poverty.

The study of 750 predominantly female tea pickers in India found that wearing glasses improved their productivity by 22% over a three-month period. In those over the age of 50, the impact was even greater, with productivity increasing by 32%.

This translated into higher incomes, which reduced poverty and improved

395,611

pairs of eyeglasses were prescribed

health and well-being for women and their families. In fact, over 95% of those taking part in the trial said they would recommend using glasses to others.



TANIA'S LIFE CHANGED FOREVER

TWELVE-YEAR-OLD TANIA from Bangladesh has endured severe vision issues all her life. Unable to seek treatment because of limited resources, Tania was forced to drop out of school. Like millions of girls, Tania was left behind simply because she lacked access to proper eye care.

Last year, Tania was examined at an eye camp established by Orbis at our local partner hospital. Once assessed, she was referred for a more thorough examination. Orbistrained specialists found that Tania's poor vision could easily be corrected with a pair of glasses, which she was fitted for at no cost.

That's all it took to change Tania's life forever. Now able to see the world around her with more clarity, Tania returned to school and quickly made up for lost time.

In 2018

4,458,266

people were screened by Orbis and our partners



THE WOMEN FIGHTING BLINDNESS IN BANGLADESH

Bangladesh is run by three dedicated eye health professionals who are all women in their 20s. Minufa, Rumpa and Kalpona – an optometrist, refractionist and an optical dispenser – ensure patients at their family-friendly center are properly

THE SINGRA VISION CENTER in

screened, treated, counseled and, if necessary, referred to the nearest hospital for further treatment.

Within the local community, the staff raise awareness about

eye health and encourage women to seek treatment at the center with the aim of removing some of the traditional and gender-related barriers that keep women from accessing eye care.

To help ensure the next generation of eye care providers will be gender-balanced, Orbis's partner hospitals across Bangladesh actively recruit and support the education of female eye care professionals at their training institutes.

IMPROVING DETECTION AND DIAGNOSIS WITH ARTIFICIAL INTELLIGENCE

LAST YEAR, we integrated the latest Artificial Intelligence (AI) technology into Cybersight. This revolutionary technology helps doctors in remote areas detect eve diseases like glaucoma and diabetic retinopathy from a photo. Photographs of a patient's eye are taken and uploaded to Cybersight. The AI system analyzes the images and sends a report to the doctor in seconds, helping them choose the best course of treatment.



ADAPTING TRAINING METHODS TO REDUCE RISK AND IMPROVE EFFICIENCY

IN 2018, we took simulation training to the next level. The Simulation Center on board the Flying Eye Hospital helps local eve teams learn complex skills in a controlled environment before operating on patients. Our simulators use the latest virtual reality technology to break down a complex surgery into smaller parts and enable surgeons to hone their skills before attempting on a human eye.

Our virtual reality diagnostic simulator also helps doctors recognize and diagnose a wide range of eve diseases. Plus. our pediaSIM simulator lets local doctors practice pediatric anesthesia and emergency situations under very lifelike conditions.



GOING BEYOND BASIC EYE CARE

LIKE ANY PARENT OF A VISUALLY IMPAIRED CHILD, Tuya did everything she could to help her little boy Nyamdorj see. He was prescribed glasses at five years old, but unfortunately his bilateral cataracts were undiagnosed and his vision got progressively worse.

When Nyamdorj was eight, he and his mother traveled by bus for 24 hours across half of Mongolia to reach the Flying Eye Hospital, where he underwent a successful surgery on his right eye. After healing, Nyamdorj will have a second surgery on his left eye, carried out by an ophthalmologist trained on board the Flying Eve Hospital. Once successfully completed, Nyamdorj will have a new chance at the promising life that all children deserve.



In 2018

78,195

eye surgeries and laser treatments were performed

SHARE OUR VISION?

For more information or to join our mailing list, visit ORBIS.ORG and CYBERSIGHT.ORG.

To help us save sight and transform lives, visit DONATE.ORBIS.ORG.



Orbis is a nonprofit organization under section 501(c)(3) of the U.S. Internal Revenue Code. Our federal tax ID number is 23-7297651 and our Combined Federal Campaign (CFC) number is 10663. Orbis.org | 1-800-672-4787

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