

# LDS Charities Aims to Empower Local Doctors

Patients in Mongolia now have access to vitreoretinal services.

**BY ROGER P. HARRIE, MD**

Latter-day Saint (LDS) Charities has been active in various types of sight-saving projects throughout the world since 2003. Programs have ranged from providing automated lens grinders for opticians to making glasses for school children to sponsoring a fellowship in vitreoretinal surgery. It is estimated that more than 550,000 people have benefited from these services in approximately 47 countries. Ocular health outreach projects are scheduled in more than 30 countries this year.

The basic principle of all of this outreach is to empower local ophthalmologists to provide care to the people of their respective countries with an emphasis on helping underserved individuals.

An assessment team meets with doctors, hospital administrators, and governmental health officials to assess the host country's needs and resources within its vision care system. The team reports back to the LDS Charities' board and proposes a project with a budget for training, equipment, and supplies. The fundamental goals of each project are directed toward sustainability. An example of this approach is illustrated by a recent project in Mongolia.

## MONGOLIAN PROJECT

Chimgee Chuluunkhuu, MD, and her husband Boyan practice ophthalmology in Mongolia's capital city of Ulaanbaatar. They have been active in outreach programs for a number of years. They load their portable microscope and cataract instruments into their SUV and travel hundreds of miles in the -40° F temperatures of the Mongolian winter. They will spend a few days in an *aimag* or local province to provide diagnoses and treatments, including cataract surgery, to the people of that area. Boyan has been known to take his rifle with him and do some hunting along the way. The couple works out of a small two-room clinic and do their best to help people using the basic pieces of dated equipment that they have.

Chimgee has been active with a national group that coordinates various nongovernmental organizations within her country. Through this experience, she recognized the need for a systematic approach to the diagnosis and treatment of diabetic retinopathy in Mongolia. She completed a master's program in epidemiology at the London School of Hygiene & Tropical Medicine.



Chimgee Chuluunkhuu, MD, uses the fundus camera.



An ophthalmologist in Mongolia learns how to use the +90.00 D lens.



Dr. Chuluunkhuu teaches an ophthalmologist how to use the laser.



The Saif campaign screens patients at an oasis.



The late Said Saif, MD, examines a child at one of his campaigns.



Passant Saif, MD, performs ultrasound on a patient.

For her master's thesis, she investigated the prevalence of diabetic retinopathy both in the capital city and in several *aimags*. LDS Charities provided her with a fundus camera with the capacity for fluorescein angiography to document retinopathy.

## PREVALENCE OF DIABETIC RETINOPATHY

### Phase 1

In her research, Chimgee found that diabetic retinopathy was present in about one-third of those with diabetes, and sight-threatening retinopathy was found in more than 6% of them. More than 96% of those with potentially treatable retinopathy (laser or vitrectomy candidates) had not been treated. At that time, in 2010, there was only one argon laser in Mongolia, and it was located at a private clinic with limited accessibility. No vitreoretinal surgery was being performed in the country.

### Phase 2

The next phase of the project was to provide a solid-state green laser to the Chuluunkhuu's clinic and one to a government hospital to increase the country's capacity to treat retinopathy. A training team was sent to Mongolia with two suitcase-sized lasers in hand. The lasers were assembled, physicians were trained on how to operate them, and the first patients were treated. During the same week, ophthalmologists from a number of *aimags* were invited to a 3-day conference to learn how to diagnose diabetic retinopathy. The symposium included a lecture series directed by a US ophthalmologist in conjunction with Chimgee and hands-on workshops on the use of the direct ophthalmoscope and the +90.00 D lens. The fundus camera was incorporated into the workshop. Participants then used the +90.00 D lenses to visualize the same fundus and reinforce what they had seen. Each participant was



A training seminar taught by the neonatal resuscitation team.

then given an ophthalmoscope and a +90.00 D lens to take back to his or her own clinic.

**Phase 3**

The third phase of this project is the selection of an ophthalmologist from Mongolia, Tsengenbayar Munkhzaya, MD, who is currently receiving vitreoretinal training at the L V Prasad Eye Hospital in Andhra Pradesh, India. This will consist of a 15-month surgical fellowship after which he will return to Mongolia to begin treating patients with all types of retinal problems, including those resulting from diabetic retinopathy. There are currently no vitreoretinal surgeons in Mongolia, and most patients cannot afford to leave the country for treatment. Several retinal surgeons from the United States will then go to Mongolia on a 2-week rotating basis to work with Dr. Munkhzaya to reinforce what he has learned and address the backlog of retinal cases. When completed, this multiphased project will have a major impact on the diagnosis and treatment of retinal disease in Mongolia.

**EGYPT**

Another project directed toward the recipients' becoming self-sufficient has recently been completed in Egypt. A family of ophthalmologists headed by Said Saif, MD, of Cairo has been actively involved in charitable campaigns for more than 45 years. The following are examples:

- An Oasis campaign conducted once yearly for 6 to 9 days; 19,000 patients are examined, and 350 major operations and 1,500 minor operations are performed.
- The Fayed campaign conducted on the first Friday of each month; 600 to 800 patients are examined, and 20 major operations and 30 minor operations are performed.
- The Baharia Oasis campaign is conducted four times per year for 2 days; 3,000 to 3,500 patients are examined,

and 30 to 40 major operations and 150 to 200 minor operations are performed.

- A campaign in Cairo is conducted in different locations on the third Friday of each month for 1 day; 600 to 800 patients are examined and 60 to 80 major operations and 45 to 60 minor operations are performed.
- The Fayoum campaign is held once a month on the fourth Friday of each month for 1 day; 1,100 to 1,400 patients are examined, and 20 major operations and 45 to 60 minor operations are performed.

LDS charities has worked with the Saifs' foundation during the past 10 years and has donated supplies and equipment and provided training. Sadly, Dr. Saif passed away 2 years ago, but the family has carried on his humanitarian work for the people of Egypt.

In 2009, LDS Charities donated an ophthalmic diagnostic ultrasound unit to the group and sponsored an observership in ultrasound at the Wilmer Eye Institute at Johns Hopkins in Baltimore. Passant Saif, MD, has been trained in the United States and has returned to Egypt where she plans to establish an ultrasound department at the hospital where she teaches and also at the Saifs' clinic. Patients who can afford to pay will be charged a fee, which will go toward subsidizing the outreach campaigns. Patients who cannot afford to pay for their surgery are treated free of charge.

**OTHER OUTREACH**

LDS Charities is also involved in providing aid to people affected by emergencies such as the Japanese tsunami. In 2010, relief in the form of volunteers and supplies was provided in response to 119 disasters in 58 countries. Immunization projects have been estimated to have saved 9.3 million lives since 2003. Wheelchairs have been distributed to 415,000 individuals since 2002. More than 190,000 health professionals have been trained in neonatal resuscitation techniques in a number of developing countries during the past 9 years, and 7.5 million people now have access to clean water due to projects during that time. Food-production techniques have been taught to 40,000 people.<sup>1</sup>

**CONCLUSION**

The fundamental goal of helping people throughout the world to become self-sufficient is the principle on which LDS Charities bases its humanitarian efforts. ■

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1. The Church of Jesus Christ of Latter-Day Saints. Humanitarian projects. <http://lds.org/service/humanitarian/church?lang=eng&lang/=eng>. Accessed December 20, 2011.