

Aboard the Orbis Flying Eye Hospital

Julia A. Haller, MD, shares her experience volunteering in Laos.

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In January 2008, Julia A. Haller, MD, spent 11 days in Vientiane, Laos, as a volunteer aboard the Orbis Flying Eye Hospital, a refurbished DC-10 jet aircraft transformed into a mini teaching hospital with wings. The Flying Eye Hospital is a program sponsored by the nonprofit Orbis International (New York, NY), whose mission is to eliminate avoidable blindness in developing countries. In an interview with *Retina Today*, Dr. Haller, Ophthalmologist-in-Chief at Wills Eye Hospital and Professor and Chair of Ophthalmology at Thomas Jefferson University in Philadelphia, discussed the challenges, rewards, and unforgettable experience of working with doctors and patients in Laos.

BACKGROUND

In Laos, 25 eye doctors serve the country's 6 million citizens. The Laotian Ministry of Health has acknowledged human resources as the key impediment to preventing avoidable blindness, which affects more than 30,000 people in Laos. Currently, the country has no subspecialty training programs for ophthalmologists, ophthalmic nurses, or biomedical engineers.

Dr. Haller, along with ophthalmologists, nurses, anesthesiologists, and biomedical engineers from the United States, the United Kingdom, the Philippines, South Africa, Canada, India, and China, provided lectures and hands-on training to 20 ophthalmologists from Laos, Thailand, Cambodia, Myanmar, and Vietnam in an effort to help these doctors establish comprehensive, affordable, and sustainable eye care in their home countries. Clinical diagnosis of eye diseases, surgical decision-making, incision/laser surgeries, and postoperative care were among the key topics that the Orbis medical team addressed in Laos.

DAY 1

After approximately 33 hours of travel, Dr. Haller and the Orbis team spent their first day examining several hundred patients at a hospital in Vientiane, located 10 minutes from where the Flying Eye Hospital was stationed. If a patient's



(Picture by Geoff Oliver Bugbee.)

Figure 1. Julia Haller, MD, performed laser surgery on board the Orbis Flying Eye Hospital.

diagnosis was suitable for surgery, Orbis physicians, assisted by interpreters from the Red Cross, gave the patient very careful informed consent and then registered him or her for surgery. Orbis guidelines give priority to children, and to individuals who are bilaterally blind, cannot afford to have the surgery otherwise, and represent good teaching cases.

A TEACHING HOSPITAL IN ACTION

Over the next 10 days, Dr. Haller and colleagues devoted time to treating patients and educating physicians. "The first part of this process was to see patients with Laotian and other participating physicians," Dr. Haller explained. "In this collaborative environment, we were able to demonstrate the way we examine patients, develop differential diagnoses, and strategize about testing and therapy. These ophthalmologists



(Picture by Geoff Oliver Bugbee)

Figure 2. A young boy awaits surgery.

do not have all the medications and diagnostic testing available that we have," she said.

Of the 35 to 40 patients that Dr. Haller examined on the first day, she treated eight to 10 patients with laser procedures and four or five patients with intravitreal injections over the course of the trip. "These procedures took a much longer time than normal because we were providing hands-on training for the physicians. They would observe for part of the procedure and perform other parts of the procedure," Dr. Haller said.

Cataract and glaucoma surgeries were also performed in state-of-the-art facilities aboard the Flying Eye Hospital, which included an exam room, a sterile facility, and an operating room equipped with top-of-the line equipment. "You forget you are on an airplane," Dr. Haller said.

Patients who had surgery early in the trip received follow-up while the Flying Eye medical team was still in Vientiane. Additionally, Orbis staff ophthalmologists conducted follow-up 2 weeks after all surgical procedures.

A VARIETY OF EDUCATION METHODS

Lectures, videos, eye-surgery simulations, and chart talks were also used to foster a rich learning environment aboard the Flying Eye Hospital. "In the 48-seat lecture hall, which was once the first-class cabin, we delivered didactic lectures, similar to those that would be given to residents and fellows in a training program, or to physicians in a

continuing medical education course," Dr. Haller said.

Any medium that could be used to teach was fully utilized. "There was a dry erase board near the laser so that we could draw pictures and discuss things further. We also used our laptops to show surgical videos," she said. A library was available on the plane, as Laos and other developing nations have limited access to medical textbooks and no access to library facilities.

CHALLENGES AND REWARDS

Dr. Haller told *Retina Today* that the level of organization, enthusiasm, and leadership on the part of Orbis far exceeded her expectations. The most challenging aspect of the trip was witnessing the disparity between the developing world and wealthy nations, Dr. Haller explained. But with that came a great reward, she said. "The feeling that you really made an impact on patient care and the level of medical education in the country, even in just a short week, is an unforgettable experience," she said.

On a personal note, Dr. Haller told *Retina Today* that her daughter, who is a senior in high school and interested in pursuing a career in the medical profession, came with her to Laos. "My daughter was so inspired by this experience. It opened her eyes to the wide world of medicine and what we can accomplish. Watching my daughter's engagement in that world blossom was truly an unforgettable reward." ■