

Medical Volunteerism Abroad

Volunteer-based missions bring ophthalmologists the chance to offer their skills to those in need.

BY RACHEL M. RENSHAW, EDITOR-IN-CHIEF

Nevis (St. Kitts-Nevis), WI

The first time that George Bresnick, MD, MPA, and his wife, Geraldine Hendriksen, visited the Caribbean island-nation of Nevis (St. Kitts-Nevis, West Indies) in 1994, they were on vacation. Nevis has been an exclusive tourist destination for many years that has remained largely untouched by overcommercialization. Although an independent nation, the vibe on Nevis is Caribbean with a heavy dose of British influence due to its long history as a British colony. Both of these features add to its appeal to those seeking a holiday off the beaten path.

The residents of Nevis are fortunate in that they have access to health care, but at the time that Dr. Bresnick visited there was no eye care on the island.

"People either had to go off-island to see an eye doctor or, as was the case with the elderly, many of them did without," Dr. Bresnick explained. Having recently finished a course in public health administration, Dr. Bresnick had a particular interest in this area. After a series of discussions with government officials, he put together a proposal for a program that would provide comprehensive eye care to residents of Nevis.

Dr. Bresnick said that the project moved forward in a swift manner, most likely because he was in the right place at the right time.

"I went back to Nevis in August 1996, sent a proposal to the government in September that was approved 1 month later, and we came back in November," he said.

Initially, patients were brought into the 5 local community health centers spread around the island for eye examinations, at which time those who required surgical intervention were identified. After funds were raised to purchase more sophisticated equipment, Dr. Bresnick and his team were able to begin performing cataract procedures.

"I also knew that we needed a laser because of the large numbers of patients with diabetes, and we were able to procure 1 from a private foundation in Wisconsin. So

about a year after the program was initiated, we had a decent eye clinic and an OR set up," he said.

In order to raise public awareness about the program, Dr. Bresnick said that the local nurses and nurses' aids were key. "They are the ones who know which patients are diabetic, and who is having trouble with vision. We asked the nurses and the nurses' aids to encourage as many older people to visit the clinic as possible so that we could screen for diabetic eye disease, glaucoma, and cataracts."

TRANSITION IN LEADERSHIP

Dr. Bresnick and Ms. Hendriksen continued to run the Nevis Eye Care Program (NECP) for 12 years until they decided to step down because of other obligations, including a diabetic eye care program in Mexico. The hope was that Nevis would be successful in recruiting a full-time ophthalmologist to run the clinic. Around that same time, however, a category-4 hurricane hit the island, causing substantial damage. The largest hotel on the island was forced to shut down for several years, with a significantly negative impact on the tourism economy.

Raymond Hubbe, MD, an ophthalmologist from Massachusetts who had been part of the NECP program for several years, recognized that it was unlikely that Nevis would be able to devote the time and resources to recruit an ophthalmologist to come down permanently. To help save the program, he decided to take over as chair.

"There is usually 1 ophthalmologist at any given time in St. Kitts from Cuba. Cuban ophthalmologists in St. Kitts typically practice on that island for 2 years at a time, and although they will see Nevisians, patients have to make the trip there," said Dr. Hubbe. He was concerned that many of the older residents, who tended to have more severe vision problems, would not travel to St. Kitts.

Dr. Hubbe has been running the program for the past 4 years, arranging at least 2 trips per year for volunteers.

"I have a lot of volunteer doctors, several of whom are retina doctors, and there's a cataract surgeon from



The island of Nevis.



Fishing boats on Nevis.



The eye clinic in Nevis.



Ray Hubbe, MD, and clinic staff in Nevis.

Milwaukee who has been very involved since the program's early days, Peter Foote, MD," said Dr. Hubbe. "He brings a whole team with him: 2 OR techs, an anesthesiologist, and an optometrist. They come down and do about 50 cataract surgeries in 1 week. They've done an amazing job in the 10 years that they have been visiting."

All surgeries are performed at the Alexandra Hospital in Charlestown. The facilities are basic, but they have the necessary equipment, said Dr. Hubbe. "There is an operating microscope and we even have a backup microscope. Dr. Foote's team brings down phacoemulsification units, and Alcon Laboratories, Inc., donates most of the intraocular lenses."

There are 2 lasers in the clinic: a green argon laser for glaucoma and retina procedures and a diode laser (both Iridex lasers). Dr. Hubbe said that on a recent trip a retina specialist from Brooklyn, NY, Robert Fieg, MD, brought an indirect ophthalmoscope attachment for the lasers, which widened the range of procedures that the volunteers were able to perform.

Dr. Hubbe estimates that approximately 500 patients are seen in the clinic yearly, although the number of patient visits is greater in the November session than in April because more cataract procedures are performed that require follow-up visits.

All of the physicians who participate in the NECP are volunteers, said Dr. Hubbe. "The government provides the space to us, and many of the businesses in Nevis help out with donations to fund equipment, and I have had private donations from people in the United States, as did Dr. Bresnick when he chaired the program." Several of the hotels on the island have helped by providing lodging for the project.

"We have been fortunate to have donations from some of the ophthalmic companies, most notably Alcon and Allergan," said Dr. Hubbe. "They both provide huge numbers of glaucoma drops, antibiotics, and steroid drops, and this has made a big difference for the program."

CHALLENGES AND REWARDS

Although Dr. Hubbe said that there have been some challenges in getting patients to come in for the scheduled appointments, overall the compliance is good.

"It's better than I expected. This is due in part to the fact that Nevis has a good public health system for an island of that size," he said. "They've put a lot of energy into their local health clinics, so there's a lot of oversight into how people are doing."

He said that strong family ties also play a role. "Family members really look after the older folks and have a good

handle on what's going on with their health," he said.

When asked what is the most rewarding aspect of volunteering in Nevis, Dr. Hubbe said, "It's the people. They're a joy to work with, and they're appreciative. It's a place where I feel I can really make a difference. At home, we have plenty of ophthalmologists who can take care of patients, but if we weren't there in Nevis, there would be no one. It does make a big difference."

Dr. Bresnick agreed. "The No. 1 reward for volunteering medical services to an underserved community is the satisfaction of being able to help people who need it," he said. "Another benefit is the cultural experience of going to a place and getting to know people. When you participate in an ongoing mission, you get to really develop relationships with your patients and the local clinic staff."

Haiti

Richard K. Lee, MD, PhD, an Associate Professor of Ophthalmology and a Glaucoma Specialist from the Bascom Palmer Eye Institute (BPEI), University of Miami Miller School of Medicine, has been involved with several humanitarian projects since his residency, also at BPEI. The Mitchell Wolfson Sr. Department of Community Service (DOCS) at the Miller School of Medicine holds many health fairs throughout South Florida, such as in Hialeah, South Dade, Little Haiti (a neighborhood of Miami), and the Florida Keys, providing health care to underserved and/or economically disadvantaged patients.

Stemming from Dr. Lee's involvement with the DOCS program, he was tapped to become the Director of Community Ophthalmology for BPEI.

Following the Jan. 12, 2010 7.0-magnitude earthquake that struck near Port-au-Prince, Haiti, BPEI teamed up with the Haitian Ophthalmology Society (HSO) and the American Academy of Ophthalmology (AAO) to create an ongoing mission to provide ophthalmic care in that country.

"The University of Miami Miller School of Medicine has a long-standing presence in Haiti," said Dr. Lee. "Two of our faculty members at the University of Miami—one in neurosurgery (Barth Green, MD) and another in family medicine (Arthur Fournier, MD)—started a nongovernmental organization in 1994 that is based both in Port-au-Prince and in Miami, named Project Medishare. Project Medishare provides care, mainly in the Central Plains of Haiti and now in Port-Au-Prince, since the earthquake." BPEI joined the effort with volunteer BPEI ophthalmologists and ophthalmology residents to perform refractions, provide eyeglasses to patients, and perform cataract and glaucoma surgeries in the Central Plains and Cap Haitien in northern Haiti prior to the catastrophic event.



The banner in front of the eye clinic at Hospital Bernard Mevs/Project Medishare.



Beatrice Valerius, MD, a Haitian ophthalmologist, and Richard K. Lee, MD, PhD, at the Haiti Eye Symposium held in Port-au-Prince, Haiti, in April 2012. Dr. Valerius participated in Project Medishare's first mini-fellowship for pediatric ophthalmology.



Dr. Lee examines a patient with altered mental status after a car accident for papilledema secondary to raised intracranial pressure shortly after the earthquake at the Project Medishare tent hospital.

"When the earthquake happened, we were the first US ophthalmologists to arrive," he said. "By now, in 2012, most of the other foreign missions have left Haiti, but because of our ongoing efforts, we are one of the few groups that are remaining and working on creating a sustainable footprint for eye care in Haiti."

Immediately following the earthquake, Project Medishare set up a 300-bed trauma and critical care field center at the airport, but operations have since moved to

Hospital Bernard Mevs. Dr. Lee is currently the Medical Director for Ophthalmology along with Michael Kelley, MBA (Vice Chair for Administration at the University of Miami Miller School of Medicine).

SERVICE AND TRAINING

Dr. Lee said that the project has several goals, the main 2 being service and training. "Only approximately 40 ophthalmologists practice in the entire country, and there are only about 6-9 residents at any given time, so we have set up a mini-fellowship program for subspecialty training. Many of the surgical procedures are performed by doctors in humanitarian organizations who fly down during the winter, do surgeries, and then leave. Although it's great that they are providing a service like this, it has been a problem for many countries because the local physicians and health care workers become disenchanted."

In order to address the situation of not having enough trained surgeons in Haiti, BPEI, the AAO, and the Pan American Association of Ophthalmology (PAAO) are creating a training program for several subspecialties within ophthalmology. The first is in pediatric ophthalmology. A recent ophthalmology resident graduate from Haiti (Beatrice Valerius, MD) was flown to BPEI via a travel scholarship from the PAAO for 3 months to observe surgery (as a foreign doctor, she is not allowed to perform surgery in the United States). The plan is to arrange, through the AAO (with Michael Brennan, MD) and BPEI, to have a pediatric ophthalmologist travel to Haiti to directly train the resident with hands-on surgery, which would create a situation similar to a surgical fellowship.

"We have similar plans for oculoplastics and retina in the near future," said Dr. Lee. "There are a huge number of eye tumors and lid injuries that need to be repaired. The retina component is important because there is no full-time vitreoretinal surgeon in the entire country," he said. "There is one ophthalmologist who performs core vitrectomies a few times a year at best with old equipment."

Dr. Lee noted that Alcon Laboratories, Inc., has donated a new, still-in-the-box Accurus system to the project, in addition to phacoemulsification units, intraocular lenses, and medical supplies. Alcon has partnered with BPEI, the AAO, and the HSO to have all ophthalmic donations funneled and approved through the HSO for all medical missions in Haiti so coordinated care is provided in association with local ophthalmologists. Although they are hoping to have retina surgeons join the mission in the near future, the goal is to install the oculoplastics program next because the technical and equipment requirements are fewer and the

Mevs Hospital/Project Medishare operates one of the few working CT scanners in Haiti.

The logistics of organizing a project of this size in an impoverished country with the added burden of devastation from the earthquake, Dr. Lee said, have been challenging.

"It's been 2 years since the earthquake, and things happen slowly, as the process of building a sustainable program is complex and costly. We still have equipment that we're trying to have sent down or acquire. This is becoming less of an issue due to our excellent relationship with the Haitian government and working with organizations such as Alcon and Direct Relief," he said. Additionally, because Project Medishare's goal in Haiti is to achieve skills transfer from volunteer surgeons to local physicians, the process takes more steps and time.

Despite the challenges, Dr. Lee has found these experiences to be personally fulfilling. "Ophthalmologists are fortunate to have transformative skills, with which we can prevent and treat eye disease and positively affect many lives in incalculable ways. For example, improving the vision of a wage earner can improve the quality of life for an entire family. When we apply our skills in the developing world, it is amazing that with something as simple as a pair of glasses, we are able to transform lives."

Dr. Lee gave an example of challenge of running a clinic in the central plains of Haiti. "In some cases we worked by penlight because patients had ridden all day on burros to arrive at 6 or 7 am just to get a pair of glasses, and we couldn't turn them away even as the clinic ran from day to night without electricity," he said. "It's remarkably satisfying to realize the big difference one can make when we put our skill to work in an environment where people really need and appreciate our help." ■

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