VISION CARE

Vision Care Leads Surgical Training Course in Tanzania



OSPITALI ya Tafa ya Muhimbili imegokea vifaa vyenye thamani ya zaidi ya Sh milioni 23 kwa ajili ya kusaidia atbabu ya macho sambamba na mafunzo ya upasuaji wa mtoto wa jicho kwa njia ya tundu dogo.

In August, Vision Care successfully led the Phacoemulsification Training Course (PTC) at Muhimbili National Hospital in Dar es Salaam, Tanzania under the leadership of three Vision Care ophthalmologists **Dr. Daniel Kim, Dr. Lisa Park, and Dr. Jae Yun Kim.**



We are pleased to acknowledge the three Tanzanian ophthalmologists, **Dr. Kilemile**, **Dr. Neema, and Dr. Christopher**, for completing this intensive surgical training for

cataract surgery. Along with the completion of the PTC Phase 2, 33 patients received sight-restoring surgeries and 95 patients received eye exams.



We look forward to continuing our educational endeavors in Tanzania!

Testimonials From Medical Student Volunteers

In this month's e-newsletter, Columbia medical students **Nivi Ravi** and **Samantha Xing** share their experiences with Vision Care in Tanzania.



Nivi Ravi and Samantha Xing Global and Population Health Program Columbia University Vagelos College of Physicians and Surgeons

The buzz about summer plans started in December. Our senior medical students referred to the summer after our first year as the "last summer," the final moments of freedom before a demanding three years of courses, clinical rotations, board examinations, and residency applications. Although it seemed like a lot of pressure to put on one summer, the "last summer" was also surrounded by a cloud of hope and

possibility. We attended various information sessions on NIH-funded research, global health research, population health, and science education opportunities, and we eventually decided to pursue summer research in global health, fulfilling a longstanding dream of both of ours. Dr. Lisa Park, our faculty mentor and Board Chair of Vision Care, partnered with the Global and Population Health Program to invite medical students to volunteer and conduct research in Tanzania. After meeting Dr. Park and learning more about the project, we knew this opportunity would be the perfect fit.

During our first few days in Tanzania, we attended the 4th All Eye Health Workers Conference hosted by the Tanzanian Ophthalmological Society (TOS) in Arusha. Based on pictures we had seen on the TOS Instagram page, we expected around thirty attendees. As we were led into the conference center, we were surprised to see a large hall filled with over 150 eye health workers, including eye surgeons, residents, allied health professionals, and exhibitors. The conference was a broadening learning experience for us, and there were numerous intriguing cases discussed, such as birdshot chorioretinopathy and loiasis (African Eye Worm), which we seldom encounter in the US.

Sam's research project involved distributing surveys at this conference to assess surgeons' and trainees' current surgical practice and interest in learning phacoemulsification. We were able to gather a substantial number of responses from ophthalmologists, assistant medical officers in ophthalmology (AMO-O), and residents, some whom perform or



assist in cataract surgeries in Tanzania. We found that all eye surgeons and most residents conduct cataract surgery, mainly manual surgery. Few surgeons have learned and are currently performing phacoemulsification, and the procedure is not taught or practiced by residents. Many patients in Tanzania are unable to access this procedure due to a lack of insurance coverage, and targeted phacoemulsification training programs must consider additional barriers, including costs of machines and essential materials, such as intraocular lenses and viscoelastic. Addressing these challenges will be crucial to enhancing the availability of advanced cataract surgical techniques and improving visual outcomes for patients in Tanzania.

After attending the conference, we volunteered for the Phacoemulsification Training Course at Muhimbili National Hospital in Dar es Salaam. We organized patient intake as well as pre-operative and post-operative visual acuity, pressure, and slit-lamp examinations. Since our responsibilities were patient-facing, we developed close relationships with patients. Many of these patients had traveled extensively to receive cataract surgery through Vision Care and some were referred to Vision Care because they had complex cases, with dense cataracts or comorbidities. Through supporting the training course, we learned a lot about cataract surgery, Tanzanian culture, and the local healthcare system.



We also assisted Vision Care's school screening efforts at Kongowe and Mwambisi Primary Schools in Pwani, a coastal region surrounding Dar es Salaam. The Tanzania Vision Care team worked with local eye care workers to coordinate training for the school teachers. During the training, the teachers learned how to check visual acuity and received lectures on common pediatric vision conditions, infection, and prevention. By the end of the training, we formed a large team of Tanzania Vision Care staff, volunteers, and school teachers, and we all worked together to successfully screen 2,604 students. The youngest students were only three years old, barely able to recall and pronounce their full names. The older students were teenagers, eager to chat and practice their English with us. Each day, many of these children face countless challenges, including food insecurity and limited access to healthcare. Despite these obstacles, their dreams and ambitions are limitless; they aspire to be pilots, nurses, doctors, and politicians. Their determination, openness to cultural exchange, and camaraderie with their peers were inspiring.



Nivi worked closely with the Tanzania Vision Care team to compile and digitize vision screening charts from screenings conducted over the past three years. Her research project analyzes screening data to determine incidence, predictors, and barriers to eye care in the Pwani Region. The findings suggest a growing incidence of pediatric vision conditions, possible links between vision health and chronic malnutrition, and

differences between post-screening follow-up rates at hospital and mobile clinics. These findings carry implications for policy recommendations concerning access to vision care in the Pwani region.

Over the course of our trip, we learned so much about medicine and global health, and we gained valuable clinical experiences in both hospital and outreach settings. We couldn't imagine a better "last summer" and feel very grateful for a life-changing experience in Tanzania.

Thank you, Nivi and Samantha, for sharing your testimonials!

Sincerely,

Vision Care USA

