

Annual Uganda Spine Surgery Volunteer Trip

Let it be: The Duke 2013 Uganda Medical Mission Experience

Sister Florence was the day floor nurse. She has been there many years and could accomplish anything with the barest of bones supplies. She and few other nurses managed all the spine ward patients which could be up to about thirty patients, many of which were quadriplegic or paraplegic and had significant needs. She was a hard worker to say the very least and she had the kindest soul. As we hurried in the first morning eager to get our shipped supplies unpacked, we came upon a minor delay as they were under lock and key and the individual with the key was not present. Used to the hustle and bustle of the US where we rarely have idle hands and continuously run the proverbial rat race in order to get things done, we were rather frustrated. Sister Florence merely said with a quiet calm, 'Let it be'. And so we did.

My first real look at Kampala, Uganda comes early Sunday morning on September 15th, 2013. We had arrived the night before but after five airports and more than 24 hours of traveling, most of us were too exhausted and it was too dark to see much out the bus windows as we pulled into our hotel. A few mild snafus checking into the beautiful Hotel Serena had us going to bed well after midnight Ugandan time and we promptly were asleep once our heads hit the pillow. The bus ride to Mulago Hospital the next morning however was eye-opening. The roads were winding and treacherous. The 'bota-botas' or small mopeds, which are the primary mode of transportation for the people of Kampala, were weaving in and out of traffic. Many bota-botas were loaded with two, three, even four people at one time. It was easy to see why many trauma patients were a result of bota-bota accidents. Up dirt roads with potholes the size of boulders, past goats and street vendors selling coffins, we at last see a rectangular building labeled 'Spinal Ward'. This is to be our new home away from home.

Walking into the spine ward there are beds lined up against each wall. Mosquito nets hang from the ceiling. Heavy beautifully colored handmade blankets are bundled around patients despite the warm air outside and in the building. Families lay next to their loved ones' beds and begin their daily routine. We pass a line of people holding envelopes full of X-rays. They have likely traveled many hours to be here today for the 'Professor' coming from the US to review their cases. Our large group of 11 walks from bed to bed as the local orthopaedic residents present each patient and the potential plan. This year our group consists of 3 surgeons: our trusty leader, Dr William Richardson, current spine fellow, Dr Christopher Hills, and myself, a PGY-4 resident, Dr Norah Foster. We bring 2 knowledgeable CRNAs, Megan Foureman and Kate



The 2013 Duke Uganda Team. From left to right: Norah Foster, Kelly Boyd, Christopher Hills, Aaron Beaver, Courtney Jeffries, Megan Foureman, Keita Ikeda, Kate Newman, William Richardson, Matthew Roman (Photographer: Donna Roman)

Newman, and 2 fantastic PACU nurses, Kelly Boyd and Aaron Beaver. We also have 2 hardworking physical therapists, veteran Matt Roman and newbie Courtney Jeffries. Last but certainly not least is our MacGyver biomedical engineer Keita Ikeda (Ike) and our indispensable photographer Donna Roman. We are a motley crew running on little sleep and pure adrenaline at this point. Each patient steals a little bit of our hearts as we hear one gut-wrenching story after another.

Bridget is a 13-year-old quadriplegic patient. Her family lost water supply to their home and Bridget climbed a local water tower to get the needed water. At the top of the water tower she encountered an electric barrier that shocked her and she fell resulting in a cervical spine injury. She worked diligently with physical therapy and did seem to be recovering some upper extremity motion during our brief time there. Despite this life-altering event and incredible loss, she had nothing but smiles for us day in and out. It's hard to image such a catastrophic injury over something we deem so basic as water.

Moses is a 34-year-old man who was forced into a ditch while driving home from work. He was thrown from the truck, he was driving and landed in a bee's nest. While he lay there on the ground with a cervical spine injury, unable to move, he was stung hundreds of times by bees until he was found and brought to us. We performed an anterior cervical discectomy and fusion for him to stabilize his neck. Moses' brother, Sampson, took care of him during his stay at the spine ward. In Uganda the families take care of the majority of the patients' basic needs. They clean them, bring and launder their sheets for them, and feed them. If medications are needed, the families are responsible for buying them. Sampson left no patient uncared for regardless of whether he was related to them or not. If ever there was a person who made you strive to be a better human being, Sampson was the one.

Nason is perhaps the most heart wrenching of stories. A few days before our arrival, he was dropped off at the spine ward. He was paraplegic but we had no history of how he became that way. We presumed his family was simply no longer able to care for him. He came with bone deep decubitus ulcers on his sacrum and bilateral greater trochanters. With no family to care for him, he had to rely on the generosity of the staff and other families for food, water, bathing, laundry, etc. Complete strangers came to his aid simply because it was the right and human thing to do. We debrided his ulcers and began wound care with wound vacs. The wound vac, also known as the 'Turtle', was a project of prior trips still in working condition and a proud accomplishment of the team. Nason was relegated to staying on his stomach essentially at all times to allow his wounds to start healing. We brought him food and water each day which he accepted graciously. All of us were dedicated to helping him through such a difficult situation but many of us questioned Nason's ultimate outcome. Would he have adequate sustenance after we left? Would he be able to heal his wounds? And if he was eventually able to heal and be discharged, where would he go and who would care for him as he was unable to care for himself? We struggled with these questions while debating the possible futility of our efforts at times, yet I doubt any of us would have acted differently.

We performed 3 surgeries a day, operating until about 6 o'clock each night. I think the OR staff was secretly relieved when we left as we worked hard each and every day! The majority of our cases were trauma patients, but we saw infections, degenerative disease, and even a 2-year-old with a hemivertebra. Without a pediatric service, she was the youngest patient ever to be operated on in the spine ward. We also operated on two patients with Potts disease. A condition I had only heard about in medical school was suddenly very real. I may never encounter Potts disease while practicing in the United States but this is the reality in Uganda. While excited to experience firsthand such 'rare' conditions, I am also humbled by how different our worlds truly are.

The staff in the spinal ward was second to none. The team is overseen by two spine surgeons, Dr Nyati and Dr Norbet. They had several residents who felt like brothers and sisters to me by the time our week was up. Residents Naomi and Alexis were as hard working as any Duke resident and would have fit right in with our Duke family, white pants and all. Together we worked, we learned, we ate, and we dreamed of our future plans and how we could hopefully someday make a difference in the education of Ugandan surgeons and our patients. The nurses or 'sisters' as they are called were a rambunctious group of women who showed us amazing hospitality and taught us their way of doing things. I found the scrub nurses to be just as protective of their table as they are in the US. It is amazing how some characteristics can cross cultures. There were also a few CRNAs and anesthesia students who worked with our anesthesia team. In some ways Uganda is every orthopaedic surgeon's dream when it comes to turnover time. We on occasion had the next patient in the room before our current patient even left the OR! That kind of efficiency just does not exist back home.

We brought with us all kinds of surgical trays, instrumentation, medications, and other supplies that were generously donated by industry. Without the efforts of many people behind the scenes and of course, Dr Richardson, trips such as these would never happen. Our OR tables were bare bones even with the supplies we brought and it was obvious that the staff there appreciated everything we had to offer. Mix-matching screws and plates seemed to be the norm there. They

did what they could with what they had while still performing excellent patient care. There was no intraoperative X-ray, so unlike our cases in the US, we had to rely on anatomical landmarks and shear surgical feel and technique. Despite this Dr Richardson, Dr Nyati and Dr Norbet offered myself and the other Ugandan residents a significant amount of autonomy. I felt a sense of pride and ownership towards the patients that I had not previously experienced in the United States.

When we were not operating, many of us were enjoying a meal together. Breakfast was eaten at the hotel each morning. There were a plethora of options that catered to any taste as the hotel commonly housed international travelers. The majority of us took to bringing a 'take away' coffee with us on the bus to help pry our eyes open in the morning. Lunch was a light meal. We snacked on breakfast items from the hotel we transported in Ziploc baggies or on the samosas, sausage and cake brought in for us by the sisters. Dinner was as much a time for mental decompression as it was for eating. Our group had an affinity for Indian food and we visited two different Indian restaurants while in Uganda. We passed dishes from person to person as though we were one large family that had known each other for years. We shared our daily stories and got to know one another better. The first-timers, such as myself, hung on the words of the more experienced group members. We strayed from water and fresh fruits and vegetables for fear of stomach upset. All of us took anti-malarial medication which has common side effects of nausea and vivid dreams or nightmares. All and all we escaped any major illnesses or injury for which we were very thankful. Not surprisingly when we got back the US, the first meal I craved was a big leafy green salad with fresh vegetables!

By the end of the week we had performed thirteen surgeries. It was exhausting and I think we all experienced a bit of an emotional rollercoaster. Each morning we raced in the building to see our patients and how they were doing. We held their hands, laughed with them, joked with them, and most importantly cared for them. They shared their stories with us and after 6 short days in the spine ward, I felt like less of an outsider. I felt welcome and a part of a team that was all working toward the same goal and was continually improving. It was amazing to see the difference between how patients in Uganda interacted with the staff and responded to surgery compared to patients in the US. There they did not complain about really anything. They were incredibly stoic and appreciative. Their postoperative pain control was little more than Tylenol for many which is vastly different from the oxycodone, morphine, dilaudid, oxycontin, methadone, etc. seen in the US. They worked with physical therapy diligently and let little limit their progress. In addition to the two physical therapists we brought with us, we were blessed to work with Julius, a physical therapist, and Augustin, an occupational therapist, from Mulago Hospital. They worked from dawn until dusk throughout the entire hospital campus. Their skills were unsurpassed. In coordination with the prosthetics and orthotics departments on campus, they were able to make the most amazing braces, crutches, wheelchairs, prosthetic legs and hands, etc. And they made all of these from literal scraps and donations. It was inspirational to see what could be accomplished from so little.

The week culminated in a half day of surgery on Friday, September 20th, 2013, followed by a trip to the local outdoor market and a celebratory barbeque to end the evening. It was with heavy hearts that we said our tearful goodbyes to the patients. We wished them well and exchanged many names, addresses, e-mail addresses, and facebook profiles. We each reflected on our experiences and I was left questioning whether I had done enough, made enough of a difference, learned enough, taught enough, and cared enough. The first few minutes of the bus ride as we pulled away from the spine ward were quite solemn. Tears were shed but as I looked around me at the determined faces of my newfound friends, I knew that many of us would be back and the work that we had done would continue on.

The barbeque was like none other. We dined on barbequed goat and local side dishes which were washed down with Ugandan beer, wine and soda. Accompanying us were the sisters from the spinal ward, the orthopaedic residents, the anesthesia team and many others. Members of hospital administration as well as Drs Nyati and Norbet gave brief speeches about their experiences with the Duke team and our impact on their hospital. I was humbled by their appreciation and kind words, as I felt truly blessed to have been a part of such a wonderful experience. We ended the evening with dancing, lots of it! We once again crossed cultural barriers with music and dance, finding a common ground amongst all of us. It was an unforgettable night. Leaving was extremely difficult, as we did not know when we would see each other again, if ever. We formed friendships and bonds that I hope will sustain the distance and time.

We were gone 10 days total. We arrived back in Durham on September 23rd, 2013. We may have come to the airport as individuals, but we returned a family. Each one of us was forever changed by our experiences in Uganda. The trip was amazing and certainly the highlight of my residency. I went with essentially no expectations which I think worked to my advantage, as I was happy to do and see anything that was available. Most importantly, I do believe we are making significant strides in helping the people of Uganda. One of the hospital administrators at the barbeque on Friday night

used the proverb, ‘Give a man a fish, he eats for a day. Teach a man to fish, he eats for a lifetime’, and likened our work to teaching them to fish. With only one trip a year to reconnect with them, education has to be one of our biggest goals in Uganda to really make any sustainable changes. It was evident our efforts were appreciated by all which is rewarding, but even more worthwhile, it seemed obvious that people were very eager to learn. And we learned right along with them. It was inspiring to see another way of life and of treating patients. There are lessons to be learned from our Ugandan colleagues including utilizing resources better and avoiding postoperative infections, as their infection rate appears to be lower than that of our own hospital.

These are but a few lessons I observed. There are countless more and endless stories to share from my time in Uganda. I hope that sharing my experience might inspire others to travel there or other areas of the world that need our help. If those who read this take away one thing, I hope Sister Florence’s words resonate loudly within each of you. The next time you find your case delayed, your patient noncompliant, your electronic medical record painstakingly unhelpful, or your day full on inconveniences, remember to just ‘Let it be’.

Norah Foster MD
Orthopaedic Resident, PGY-4