

Ayubowan

A medical student's encounter with healthcare in Kandy, Sri Lanka

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ABSTRACT

INTRODUCTION: Stepping into a new environment strengthens one's ability to examine the interplay between cultural, environmental, and socioeconomic factors, and their impact on health. With aims of broadening my perspective of medicine and developing my clinical skills as a medical student, I traveled to Sri Lanka and to work as a volunteer in hospitals, clinics, and a school for the disabled.

DISCUSSION: Through working with local physicians and immersing myself in the culture, I gained unique insight on healthcare in Sri Lanka. I witnessed the impacts of a 25-year history of ethnic civil war, the devastation and rebuilding following the 2004 tsunami, and discussed the challenges involved with facing the growing diabetes epidemic.

CONCLUSION: My experience in Sri Lanka will affect the way I practice medicine. I have a broader and deeper understanding of global healthcare challenges, as well as an appreciation for the diverse patient narrative. Overall, I am reminded of what it means to be a doctor, and what it means to be a member of a global profession. To me this is both a responsibility and a privilege that I look forward to further integrating into my career.

In my third grade class yearbook we were asked to describe what we want to do in the future. Most students wrote along the lines of “I want to be a teacher/doctor/firefighter when I grow up.” My entry stated, “I want to travel.” I am not exactly sure where this idea came from, but it is a desire, dare I say *need*, which has followed me throughout my adult life. One can read thoroughly researched articles, learn statistics, look at pictures, watch documentaries, or even communicate with people in remote locations all from the comfort of home, but there is something valuable and unexplainably important that can be gained only from the experience of travel. As I reflect upon my medical volunteer experience in Sri Lanka, I am so grateful that I was able to incorporate travel into my education.

Stepping into a new environment always strengthens my ability to examine the interplay between cultural, environmental, and socioeconomic factors, and in this case, their impact on health. Sri Lanka is an ecologically and culturally diverse island off of the southern tip of India with a population of 21,481,334¹. Rich in agricultural resources such as tea and rice as well as mineral resources, the island has a long history of rule by imperialism, previously colonized by the Portuguese, Dutch, and British, before becoming a Dominion of the British Empire in 1948 and a finally a Republic in 1972. The main languages are Sinhala, Tamil, and English. While under British control, the education system became English-based; so most textbooks and colleges, including medical schools, still use English.

My trip began in Colombo, the capital city and from there I traveled to the second largest city, Kandy, which is situated in the center of the country and known as the religious capital of Sri Lanka. Sri Lanka is about 70% Buddhist, 13% Hindu, and 10% Muslim². Among the

many ancient treasures of Kandy, is the Temple of the Tooth relic, which makes it one of the most sacred places of worship in the Buddhist world. For the duration of my time in Kandy, I stayed in a house just outside the city in the small rural town of Mawilmada and lived with volunteers, mostly European, who were engaged in other types of projects in Kandy. Our volunteer coordinator, Dhammike, also lived in the village with his wife who cooked traditional Sri Lankan meals for us each night. This usually consisted of rice with different types of curry. Occasionally there was fish or chicken in the curry, but most often they were vegetable based. One of the mainstay ingredients is Jackfruit, which is a giant tree fruit that is green and starchy like a potato. The dishes themselves somewhat resembled Indian cuisine, but the flavors were completely different...and delicious!

After settling into my new quarters and adjusting to the nine-and-a-half hour time difference, I was ready to begin volunteering. Dhammike gave my travel partner Stephanie and me an introduction to the hospital administrator of a private hospital called Lakeside Seventh Day Adventist Hospital. From here on, we were basically on our own. With only one year of medical school under our belts, this was a little intimidating, but in retrospect our independence ended up providing us with so much valuable exposure in such a short period of time. We quickly learned our way around the city and became competent at navigating the very complex Sinhala bus system. Each morning we would have a breakfast of white toast and fruit, either fresh papaya or melon. We then would walk about a mile and a half to the main road and wait for a public bus that took us into the center of Kandy. In Kandy, we walked around a lake to the hospital, and by that time, there was always a substantial line of patients waiting to be seen in clinic.

Healthcare in Sri Lanka is privately and publically operated. About 50% of outpatient services are private and only 60% of the population has access to public care, “government hospitals.” Healthcare expenditure amounts to 3.8% of the GDP, with the government funding about 43% of healthcare costs overall². The system is severely underfunded and understaffed with 44% of public health nursing positions vacant². Lakeside for example, only had a few formally trained nurses, and instead mostly employed “ward sisters,” who received minimal training. Due to the lack of educated professionals the bulk of the system therefore relies on the leadership and decision-making of physicians³.

My favorite doctor to work with at the hospital was Dr. Fernando, or as everyone called him, The Professor. Technically, he was a vascular surgeon, but in reality, he was whatever he needed to be. He split his time between government hospitals and community hospitals. In seeing patients with him, he allowed us to do parts of the physical exams and would even translate for us as he taught. His passion for medicine and humanity shone through everything he did.

I vividly remember the first time he invited us to his operating room to assist in a thyroidectomy due to goiter. I nervously waited outside the door, unsure of what was expected of me. Eventually, the scrub nurse opened the door and told us to come in. My eyes glanced downward and I noticed she was in bare feet, as were the rest of the operating room staff. She explained that this was considered more sterile. I changed into the pair of scrubs and consolation flip-flops she gave me and was fascinated by the procedure before

me. The Professor skillfully dissected the thyroid gland, methodically clamping and tying each vessel by hand. This technique is equally as effective, but more labor intensive than using the electrocautery or ultrasonic cautery as we do in our hospitals. As he worked, the anesthesiologist manually pumped air into the patient's endotracheal tube, because they also do not have the automated ventilating machines as we have here. She left the room a number of times, designating the ventilation duties to me.

As The Professor closed the wound on the patient's neck, he looked at her with sadness and explained to us that he is trying to make the scar as inconspicuous as possible. He is worried about this patient, because she is in her mid-twenties, works as a teacher, and is still not married. While this sounded pretty normal to me, he said in her culture, these things deteriorate from her status or desirability as a woman, and having something like a scar on her neck could ruin her chances of marriage. Initially, I thought how fortunate I was that I do not live in a system with these types of confines on women. While this is true, I also realized that the concept was not so foreign. The Professor healed the patient's medical problem, however, his work may have an impact on other aspects of her life. I think no matter where we practice as doctors the nature of the work has limitations. If not cultural, they may be religious, financial, resource, or insurance provider dependent. We all practice within confines that may be out of our control, but it is our responsibility to consider the impact of our work.

One day I came back to the volunteer house flustered after witnessing how a Caucasian woman was treated at the hospital. She was a local resident, a descendent from a long line

of wealthy Dutch colonists, who presented with dizziness. She acted just like any other patient: was very polite, spoke Sinhala, wore Sri Lankan style clothing; however, the hospital staff treated her like no one else. They prevented her from waiting in line and they took her to the staff room immediately, rather than the usual patient examination rooms. After speaking with Dhammike about this, he told me that this type of treatment is a very common precedence. Furthermore, he explained that not very long ago, the caste system was also a major determinant of the way one was treated, and to an extent, it still is. He told us how he is of a high caste, and he employs people of low castes, who also have the darkest skin such as our housekeeper Mohan as a form of charity. Later, I spoke with Mohan and asked him about life. He has a wife, 2 children, a dog, and a moped. His house roof falls down on a regular basis and he has to prop it up with loose bricks, but he says he is one of the happiest people alive and dreams of becoming a tuk-tuk driver.

The more I got to know Mohan though, the more I heard how his life has been affected by inequality, war, and natural disaster. He never complained or looked at these things as tragedies, for these things have affected everyone's life in some way. Sri Lanka has only recently emerged from 25 years of a violent civil war between the Tamil Tigers and the Sinhalese. For political reasons, neighbors were fighting neighbors with over 800,000 people displaced and an estimate of over 80,000 deaths². As of March 2014, the UN has now decided to take steps toward a war crimes inquiry. In addition to the war, over 440,00 Sri Lankans were displaced with 31,000 deaths from the 2004 tsunami^{2,4}. I traveled to some of the beach towns including: Ambalangoda, Hikkaduwa, Weligama, Mirissa, and

Matara. Some areas showed signs of rebuilding and recovery, but many remained wiped out with rubble in place of buildings.

The extraordinary beauty of the beaches against the desolation of destruction was quite a powerful image, and the impact these events have had on health is just as significant. A considerable portion of the population does not have access to healthcare and has never received preventative care, while those who have received care have no existing records of it. The effects on mental health are also grossly underestimated. In 1991, Sri Lanka had the highest rate of suicide in the world². There is a lack of awareness and recognition of adjustment disorders and psychological trauma⁴. Some of the doctors mentioned observing an increase in alcoholism as well. Unfortunately, the resources for supporting these patients and treating these problems are almost non-existent.

Some of my most memorable experiences were the times when The Professor would just talk with us between seeing patients. He was born and raised in Sri Lanka, but completed his medical training in England and Germany. He is very well traveled and was eager to discuss just about any topic. One thing he said will always remain with me, “our profession [*medicine*] is a global profession, and that’s what makes it noble.” I think this philosophy explains why he treated us with such warmth. We were not just foreign students on summer break to him; we were future teammates in a much greater game.

The Professor told us how Sri Lanka has no money to invest into medical research, new drug development, or technological advancement, as does the United States, yet their

patient population nonetheless benefits from such innovations. He believes that it is imperative for our profession to share knowledge, because we have a responsibility to all patients. By this same notion, he wanted us to use our experience in Sri Lanka to the fullest, and became invested in exposing us to things we may never see in the US. He used his personal contacts to take us to places where foreigners are not welcome—the teaching hospitals. He hand-wrote a note, gave us the name of a doctor, and told us to find him at the teaching hospital.

The next day, we brought Dhammike with us and took the bus to the new hospital where we were immediately stopped by security. After much debate and passing of the note between Dhammike, guards, and nurses, we were escorted to an administrator. We explained our purpose, showed him the note, and were eventually handed off to the doctor running the surgical clinic. We thought Lakeside was a busy hospital, but it did not even compare to this one. People traveled long distances to come here, and because it was government-run, it was free for them. There were multiple patients per bed and some patients on the floor. We worked alongside medical students from University of Peradeniya to see as many patients as possible, barely making a dent in the line outside the door.

Throughout the remainder of our time, we met other doctors and made other contacts that led us to work at an orphanage and at a school/work program for the disabled. This program provided adults with work skills training and children with education and specialized therapies. We learned some of the physical therapy techniques and were able to use them on children who had cerebral palsy. Some of the other children with whom we

worked in the classroom had autism, Down's syndrome, or developmental problems due to consanguinity.

Between the two hospitals, orphanage, and school, I saw many routine disorders such as frozen shoulder, *Staph* infections, hernias, appendicitis, intussusception and strokes. In addition, I saw problems that are relatively uncommon in the United States, such as malnutrition, alpha thalassemia, goiter, amputations, use of Lippe's loop (an IUD used in the 1950s), Leprosy, and Dengue fever. We identified breast cancers by physical exam alone and did not order imaging to confirm. Since women generally did not receive preventive care, breast cancers were not usually identified or treated until they were particularly advanced. Due to the lack of available resources, the doctors relied on physical exam skills as their most important diagnostic tool. This was the perfect opportunity for us as medical students to practice such skills.

The most common ailments that we observed were complications from diabetes. We saw numerous cases of diabetic foot neuropathy leading to infections that sometimes required skin grafts, fasciotomy, and even amputation. Some of these patients are not educated about wearing shoes, diet/exercise, monitoring their blood glucose, or taking medications to control their blood sugar. Others cannot afford the medications and develop problems such as diabetic nephropathy or stroke. It is difficult to estimate the prevalence of diabetes, because many go undiagnosed, however some have published a rate above 20%². It is becoming an epidemic, and many of the doctors we worked with indicated diabetes as their greatest public health concern. There are a number of factors believed to contribute to this

problem. As the population becomes less agrarian and more urban, people have become more inactive. In recent years “junk food” has also become cheap and readily available, and there is a lack of education about nutrition⁵. The Professor told us that Sri Lanka has no shortage of food. In fact, there is a plethora of fresh vegetables and fruit that are very affordable for most people, yet malnutrition is common: 17% of babies are low-birth-weight, 29% of children under 5 years are underweight, 65% of pregnant women are anemic, and 70% of the population has an iodine deficiency². The doctors we worked with related that nutrition was not a topic covered in their medical school education, and they were very interested in how we were taught nutrition.

They asked us, “How many sandwiches do you eat for lunch?” In Sri Lanka, sandwiches consist of two thin pieces of white bread filled with margarine and jelly, so it is possible to eat two or three and still be hungry. If you do not pack sandwiches and buy lunch, the options are snack-like foods. Fried samosas and other types of pastries filled with hot dog meat or potato and onion mixtures. Dinner primarily consists of rice and starches with some curry. All throughout the day they drink tea with sugar and they have many pastry type desserts available as snacks. The doctors asked us to compare this to what we eat in a day (or what we are taught to eat), and give a lecture to the hospital staff about nutrition so they could advise their patients accordingly. This was a rewarding opportunity to use our education and pass on some knowledge.

In conclusion, it is extremely difficult to represent the value of my Sri Lanka experience in words. I took away specific knowledge, but in a broader sense, I took away something that

will affect the way I practice medicine. I will have a deeper understanding of the experiences and challenges some of my patients have faced, and I hope it will improve my ability to attend to their needs. In Sinhala, there is no word for *hello* or *goodbye*; instead the word *ayubowan* [*eye-you-bo-won*] is said, which loosely translates to “may you live longer and be healthy.” It is a greeting used toward both loved ones as well as complete strangers. This universal blessing and my experience overall reminds me what it means to be a doctor, and what it means to be a member of a global profession. From my perspective, this is both a responsibility and a privilege that I look forward to further integrating into my career.

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