Medical Spanish elective in Ecuador

By Deborah Rose

I had the opportunity to spend the month of February 2020 in Riobamba, Ecuador for an international medical elective with a program called Cachamsi (Cacha Medical Spanish Institute). There were about 20+ other medical students and residents from other institutions (NYU, Stanford, Missouri, Georgetown, Cincinnati, etc) completing the elective this month as well. It was such a great experience.

Cachamsi (Cacha Medical Spanish Institute) offers clinical immersion rotations in a hospital, outpatient, and rural setting in Riobamba, Ecuador. The duration of the program is a month, and students complete rotations in the outpatient and/or inpatient setting from Monday through Thursday in the morning/afternoon, and spend 2.5 hours in Medical Spanish class in the morning/afternoon/evening. One of the main goals of the program is for students to enhance their communication skills and be able to perform a complete medical history and physical examination in Spanish.

I completed a 4-week rotation on the Neurology service at Hospital General Docente de Riobamba. My attending, Dr. Rodriguez, is a Cuban neurologist who trained in his home country before coming to practice in Ecuador. I learned so much from him, such as conducting a portion of the neurological exam in Spanish and interpreting CTs and MRIs (in *Spanish*). He quizzed me on a number of random things (again, in *Spanish*, which made it so difficult), including all of the anti-epileptics that I could name off the top of my head, the treatment algorithm for status epilepticus, and the dosages for their commonly prescribed medications such as paracetamol (similar to tylenol) and carbamazepine. Dr. Rodriguez was a great attending. I also really enjoyed working with several other interns who took turns rotating through the Neurology service as well.

During my month in Ecuador, I lived in the Indigenous community of Cacha. I was specifically in Puraca Tambo, a cultural touristic center. (Pucara is Kichwa for "panoramic view", and Tambo "a place of rest"). The nights and early mornings were quite chilly (we were situated in the heart of the mountains), but the space heaters they provided for us were lifesavers. I'm glad I packed multiple sweaters and a pair of warm, plush socks to wear to bed. I had my own cabin to myself. The showers were hot, the wool blankets cozy, and there was ample room to spread my things throughout the cabin. I enjoyed living in Pucaratambo for the month. The staff was also incredibly accommodating, and our cooks "Mama" Luz and Jose were phenomenal.

Segundo, who I like to refer to as our homestay dad (and the person in charge of Pucaratambo), would take us to our rotations in the morning and our Medical Spanish classes in the afternoon. It's been interesting to take note of some of the profound cultural differences that exist between the U.S. and Ecuador (from what I've seen in Riobamba) in the clinical setting. Here are a couple of things I immediately picked up on during my first week:

1. Medicine is still quite patriarchal. Overall, patients are not autonomous and unfortunately many lack a basic understanding of their medical conditions. For example, a 70-year-old man with Parkinson's had never taken any anti-Parkinson's medications (though he'd had the diagnosis for a while). He was simply drinking rosemary and coca tea for his therapy. Our attending firmly said that all of the rosemary and coca tea in the world would not take his Parkinson's symptoms away. Our patient did not understand that these natural 'treatments' would have no effect on his dopamine levels, which is the pathophysiological basis of the disease.

The most autonomous individual we encountered was a family member of an elderly female patient we ended up admitting because she complained of a sudden, severe headache. Her 20-something-year-old grandson asked a number of things, such as the purpose of several medications we prescribed, what our clinical suspicion was for his grandmother’s condition, and what the next steps were for her care. "Excellent," I thought happily to myself. I

loved seeing patients and their family members actively engaged in the patients' care. This young man's line of questioning may have been a nuisance to my attending and the interns but I was delighted to see that he was confident enough to ask such well-informed questions. Many of our other patients simply expected to be told what to do, what medications to take, what imaging/labs to obtain outside of the hospital (since we could not offer these things), and when to come back for the next appointment. It is part of the medical culture here.

2. This is my first time volunteering in a medical setting in a developing nation after gaining much exposure to the way medicine is practiced in the U.S. (during the third year of medical school). I believe that my medical training so far in the U.S. has made me especially sensitive to the differences that exist between our healthcare system and that of a developing nation. I admit that there were a few things I found bothersome and horrifying, while others were simply amusing and eyebrow-raising. Of the amusing things, the lack of a sense of urgency was probably the most salient for me. I think of myself as a New Yorker in many ways, so imagine how painful it was to suppress the urge to speed walk to see our inpatient consults and instead walk alongside our attending and interns while they meandered through the hallways as though they were on the beach. Eventually, I got used to walking at this snail pace but to be honest, it is not something I want to get used to during my training or career.

   Of the things I found bothersome and horrifying, the lack of medical resources was most significant. This, of course, is not the fault of the physicians, interns, nurses, or other hospital staff. This problem is multifactorial, and it stems from and is interconnected with deeper issues pertaining to politics, the government, the economy, infrastructural instability, and poverty. It was heart-rending to learn from one of my friends (a Physician Assistant student) who completed an Emergency Medicine rotation at the same hospital that a 65-year-old woman passed away from complications of chronic cholecystitis (she went into septic shock) because the emergency room did not have the appropriate supplies on the crash cart. For example, they attempted to intubate her but could not because they did not have anything to suction away her secretions in order to properly visualize the airway.

I will never forget the 28-year-old man with a new diagnosis of HIV/AIDS who we were consulted for regarding a new-onset headache he developed after taking his anti-retroviral therapy (ART) for the first time (ritonavir, emtricitabine, and tenofovir). He appeared very pale, weak and extremely emaciated. I was told that it had been about a month since his diagnosis, but he didn't start ART until this admission, and he likely had HIV/AIDS for a long time prior to the official diagnosis. My intern shared with me a

few days later that he'd passed away from complications of the disease. I was shocked. For much of that evening, I couldn't help but wonder what this patient's story was. I wasn't there during the first encounter when they initially heard his narrative. Perhaps he had sexual relations with men but kept it from his Indigenous family because such relations were absolutely taboo in their community. Maybe he contracted the virus from an unfaithful girlfriend? Could he possibly have visited a brothel? Regardless of the method of contraction of the virus, he should not have died from its complications at such a young age.

The saddest case I saw was that of a 7-year-old boy ("Juan"). He was brought into the ED by his parents who reported that he'd become progressively unresponsive and lethargic over the past several days. They presented on a Wednesday, and reported that Juan had started appearing weak and unable to walk since the Thursday prior. They waited nearly a week to bring him in. (I learned towards the end of my rotation that the Indigenous community brought sick relatives to a natural healer first before going to the hospital). Juan would not open his eyes to voice, but roused slightly to sternal rubbing. He lacked reflexes throughout and had pinpoint pupils. We asked his father to help us get him to walk, but he was extremely unsteady on his feet. Our attending suspected that Juan ingested a toxic substance, so we sent off a toxicology panel. On my way out of the hospital that day, I ran into Juan's mother and four of his siblings. "Por favor, doctorita, cómo está mi hijo?" [*Please, Doctor, how is my son?*] Juan's mother's Spanish was thickly laced with a Kichwa accent; it sounded staccato and heavy.

I greeted them warmly and shared that Juan was stable and doing fine right now. I told them that we suspected he may have accidentally ingested something toxic so we ordered a toxicology panel to test for a number of different substances. If those results come back positive we'd have a better idea of which exact treatment to start Juan on. They stared at me for a few moments and I feared that I either confused them with poor Spanish or with too much medical jargon in Spanish. Finally the mother, and older brother and sister thanked me profusely and scurried away to see Juan.

The next day (Thursday), the panel returned negative and Juan improved significantly. He had improved strength and 1+ reflexes in all extremities (improved from no reflexes the day before), and his pupils had returned to normal. The doctors were still not sure what could have caused Juan to become so unresponsive, but we were mostly relieved that he was doing much better. When I returned to the hospital after the weekend on a Tuesday, I learned from my attending that Juan had passed away the day prior. For a moment I thought I'd been punched in the stomach. "Se murió?! Pero cómo?" [*He died?! But how?*] I asked Dr. Rodriguez. He admitted that he had no idea what the cause of Juan's death could have been. The boy was doing much better by the second day of his admission, so he was sent home. He passed away a couple of days later. The family refused an autopsy. Dr. Rodriguez and the intern surmised that Juan may have been hurt by a stranger on his way to or from school. Many children walk on their own to schools in the communities without a vigilant adult guardian to make sure that they're always safe.

"Pero quién lo habría matado y por que?" [*But who would have killed him and why?*] I asked.

My attending and intern shrugged. "Sabes, la gente es mala." [*You know, people are evil*]. I remember that my attending also said something along the lines of, "Tampoco sería la primera vez que esto ha sucedido." [*This also wouldn't be the first time that something like this has happened]*. I couldn't believe this. Juan was just a *child*, a 7-year-old boy who hadn't even begun to experience life yet and already he was snatched away by the clutches of death. I wanted so badly to snatch him back from death's fingers, revive him, and deliver him into the hands of his heartbroken family. Was Juan hurt by a predator in their community? Did he accidentally ingest something else (or the same substance) that maybe wasn't even picked up by the toxicology screen the first time? I respect the family's decision not to have proceeded with an autopsy, but I hope that they are able to find peace, and importantly, I pray that Juan's soul rests in peace.

This international experience was incredibly eye-opening. I am very grateful for the opportunity to have spent a month in Ecuador on this Neurology rotation with Cachamsi, and importantly, for the tremendous generosity of the American Women's Hospitals Services committee.