Global Health Experience

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September 24, 2023

 I spent the summer in Zaragoza, Spain. Before arriving in Spain, to prepare for the trip, I took the Advanced Medical Spanish class offered fall of my M1 year. Additionally, I used Duolingo to practice my Spanish every day. On our first day, we went to the Centro de Salud, a family medicine clinic, to meet the program director, Rosa. Rosa gave us an overview of the Spanish healthcare system, local recommendations, places to travel, and a tentative schedule for the month. For the rest of the first day, we shadowed one of the family medicine doctors, Gary.

 The following day, we had the opportunity to assist in minor surgeries in the family medicine department. The patients were coming in for two reasons: wart or skin tag removals. In the first few cases, we just watched, took notes, and asked questions. Then, the resident asked a medical student’s favorite question, “tu quieres probarlo? [Do you want to try it?]” I was excited and ready to jump in. The residents allowed us to use the cryo freeze gun to remove warts as well as the electronic scalpel to remove skin tags. She even showed us how to properly inject lidocaine into the patient's skin before the treatment. We saw patients from 9 am to 1 pm, then the residents said we were done for the day. We got lunch by the river and spent the rest of the day exploring Zaragoza.

 The rest of the first week we shadowed Gary at the Centro de Salud. Gary was a Peruvian-born family medicine doctor. He completed his training in Peru, then moved to Spain to practice. In Spain, they accept physicians from the US, Latin America, and other parts of Europe. Thus, many of the physicians in Spain completed their training in a different country. Gary was a teacher at heart. He would take the time to explain each patient's case to us while asking us relevant questions, like which drug to use or what complications we should be aware of (keep in mind this is all in Spanish). Even though I didn’t always know the answer (or sometimes even understand the question), it was really helpful to go back through some of the concepts and pharmacological agents we had learned. The hardest part about this first week was the medical Spanish vocab. During the day, I would write down all the terms I did not understand, and then look them up later; this was very helpful.

 During my time at the Centro de Salud, not only did I get refreshed on a lot of concepts we learned from repro, cardio, metabolism, renal, and pulm units, but I also learned a little bit about the healthcare system as a whole. Many of the patients we saw were between the ages of 50 and 90. The elderly population receives benefits from the government like free cleaning, grocery delivery, and a help button in case they ever are in need. Doctors are expected to ask patients of this age group are if they receiving and using their benefits at every visit. There were also many patients with type 2 diabetes. All patients who take insulin are given a free glucometer to monitor their sugar levels. Gary took the time to explain the machine and how to use it to these patients. I discovered that the government covers doctors' salaries, which are contingent on the size of the patient cohort they serve. Generally, each doctor is responsible for a cohort comprising 1000-2000 patients. Family medicine practitioners typically cap their daily patient load at 35. Once doctors complete their residency, they are assigned a specific position or cohort and can remain in that role until retirement without concerns about job security. Also, doctors have the option to supplement their income by working extra hours in private hospitals and clinics.

 On Monday of the following week, we accompanied a family medicine doctor, Marta, on her visits to the rural towns of Spain. We stopped in Ruesca first. There we saw several elderly patients in the 3-room clinic at the foot of the town. We observed, asked questions, and were able to participate in the physical exam. Marta worked at this clinic 2 days a week from 10 am - 12 pm. Another doctor worked the other 3 days with similar hours. This was the only clinic or medical resource building in Ruesca. We moved along to the following town, Miedes. We saw many patients within two hours. Many of the patients were middle-aged or elderly coming in for a wide range of problems. I learned that immigrants to Spain are granted access to the free healthcare system and benefits after 3 months of residing in the country. Also, many immigrants to this area are from Romania. After seeing patients in the clinic we went on 2 home visits. These visits were routine checkups for chronic conditions. Marta seemed to have a personal relationship with each of these patients and their families. In addition to the clinic, Miedes has a pharmacy that is open daily from 10 am - 6 p.m. The Centro de Salud for this area is in a town called Catalayud, which is about 30 minutes outside of Ruesca and Meides. After visiting Ruesca and Miedes were returned to Catalayud to explore the town.

 The next day we began our hospital visits. I was paired with a fourth-year anesthesia resident at a university hospital. We met at 8:15 a.m., and we exchanged quick introductions as we hustled to change into our hospital scrubs in the locker room. From there, we made our way to the pre-operative area. My assigned resident spoke at a brisk pace, but I grasped the essentials: she was currently on her cardio rotation, these surgeons didn't allow medical students, I would be following another resident. Once we reached the pre-op area, I had the pleasure of meeting Eva, my partner for the day. She was working on otorhinolaryngology this week. The highlight of the day was witnessing a jaw reconstruction surgery. Eva and her attending graciously walked me through their techniques and patiently answered my questions. My Spanish proficiency at that point was still a bit rusty, and I could understand only about 50-60% of the conversation. Nevertheless, I made an earnest effort to communicate and respond in Spanish.

Over the following weeks, I accompanied various residents in different facets of anesthesia, including trauma, general surgery, maternal & infant care, pediatrics, and pain management. I witnessed a diverse range of surgeries, from hip replacements to cases involving ovarian torsions. Each day, I inquired about the pharmaceuticals used during procedures and recorded their names and functions in my notebook. Many of the preceptors were kind enough to provide hands-on guidance in operating various pieces of equipment within the operating room, such as the intubation machine, the BIS monitor, and the vital signs monitor. The experience was marked by thrilling moments, including performing ultrasounds, assisting with nerve blocks, preparing medications for surgery, and participating in patient ventilation. It was captivating to observe how anesthesia practices varied across different patient populations, offering me valuable insights into the nuances of this field.

 While working in various sections of anesthesia, I gained valuable insights into not only anesthesia procedures but also other medical specialties and the healthcare system as a whole. An essential tool throughout subsections of anesthesia was the ultrasound, which was nearly used in all procedures. By the end of the summer, I had developed expertise in using ultrasound to identify arteries, veins, and nerves in multiple regions of the body. In a different context, I also learned about healthcare practices in Spain. For instance, the country offers free in vitro fertilization services to women under the age of 40. However, there is a significant downside to this program - the waiting list can extend up to 2 years, and many women become ineligible due to age restrictions during this waiting period. On the other hand, opting for private healthcare allows women to access these services in less than a week.

Moreover, it's worth noting that all patients have the opportunity to receive services from the pain unit, which offers a wide range of treatments, from radiofrequency therapies to botox injections and epidurals. This comprehensive approach to healthcare allowed me to gain a holistic understanding of the medical field during my time in Spain.