

Summer Enrichment 2017

Bryan Morales

My goals for my Summer Enrichment project were to travel to the state of Jinotega in Nicaragua, establish a bond with the people in Jinotega, and to learn and serve with Nicaraguan physicians in impoverished, rural, and hospital settings. Jinotega is situated ideally for service and learning in all of these settings. Upon arriving in the city of Jinotega (located in the state of Jinotega), my first effort was to learn more about my host family, sharing my story with my host family and their friends, cooking dinner for them, and playing games. All of this was to get a better sense of biases, expectations, and commonality that I would have to be aware of or continue to reinforce. Since their day of independence was soon coming up, I was also able to go to parades in honor of their independence. I also went to museums and learned more about their rich history and culture. Shortly after arriving, I met with Dr. Osman Palma, the General Director of SILAIS for the state of Jinotega, which stands for El Sistema Local de Atencion Integral En Salud (paraphrased: Local System Attentive to Integrative Care). SILAIS was established in 1990 by the Nicaraguan Ministry of Health.

I was then directed to the Director of the Guillermo Matute Health Center and its Director Ligia Zelaya who arranged a daily plan for me in the Health Center or outside of the health center with more impoverished or rural communities. My first experience was to shadow Dr. Normon de Jesus Rueda. He had already been a Director of a rural outpost in a very northern and rural area of Nicaragua and had recently been transferred to Jinotega to begin working as the Chief Epidemiological Director of Jinotega State in addition to his duties within the Emergency and Febrile Unit at Guillermo Matute. Dr. Rueda initially showed me the Center's Facility and Staff. Afterwards, I was briefed in length and detail regarding MOSAFC or Modelo de Salud Familiar y Comunitario (Paraphrased Model for Family and Community Health) that was instituted in Nicaragua approximately 7 years ago. Then, he showed me the process of collating cases of infectious disease from over 50 municipalities (counties) and how this was then reported into their national system. Immediately after we rounded for the remainder of the day, including time spent in their Emergency Section as well as their Febrile and Infectious Disease Unit. I spent several days with Dr. Rueda and learned a great deal in regards to the system's advantages and disadvantages, Physician navigation with patients and their populations, epidemiological surveillance, preparation, and infectious disease prevention.

My next evolution was to spend time in the Nurses station where they carried out orders by physicians in a separate office location within the Health Center. While I was initially confused by this direction, I soon understood why shadowing in this area was part of my comprehensive learning. Essentially, all procedures were conducted in this location. Depending on the complexity of the procedure, Doctors would notify staff of intended procedures and I was able to observe how Nurses prepared for these procedures. I was able to watch every procedure in this area regardless of which physician was doing it, which would have been different if I was only following one physician. I also observed vitals readings, asthma treatments, injections, sutures, etc.

Next, I was then directed to the Community of El Sandino located on the eastern side of Jinotega, which also bordered multiple rural areas. I met with Dra. Anton and Salazar who ran the community outpost along with two other nurses. My time spent with them accomplished what was truly

a memorable and invaluable learning experience. The Sandino post provided medical attention to 5 urban neighborhoods, which were also the poorest and with the highest crime, and 3 rural communities. At this location, I learned a great deal about primary care as the model of MOSAFC requires that all citizens report to the outposts prior to going to the hospital or to the health center. Referral must be provided prior to patients being seen at the higher echelons of care (unless of obvious emergency). I was informed about how the posts fit into the MOSAFC system and the multiples metrics that need to be accomplished that are required by the State and National SILAIS. Classes were also taught to interns/residents on value based medicine and patient-physician relationships. Additionally, since they knew that I was interested in Pediatrics, I was also instructed on height/weight/head circumference recordings, immunizations, and developmental progress and able to observe and shadow Dra. Anton or Salazar during new birth visits, well child visits, and immunization administration with an emphasis on counseling as a way to encourage and stimulate better continuity of care and bonding between child and mother. Several days into my time at the El Sandino Post, I then accompanied Dra. Anton to walk into the community in order to track down those patients that had not returned for their scheduled immunizations and to pass out brochures on a new law that had been instituted regarding the Rights of the Disabled and/or Incapacitated. Through many serious conversations with Dra. Anton and community members, I gained a greater understanding of the social factors, community spirit/mentality, and health issues that plagued these communities as well as how to build a better and longer lasting trust with Latino patients.

Soon after I finished my time at the El Sandino Outpost, I returned back to Guillermo Matute Health Center. I was then directed to a class on Interpersonal Violence at the Institute of Natural Medicine. I attended this Interprofessional seminar with approximately 20 physicians and nurses (primarily physicians) that came together to be instructed by a Senior Physician on violence (in any form) against oneself, others, and finally with a specific focus on Domestic Violence in the patient population. The intent, format, and execution of the event went off perfectly and I learned so much from my fellow physicians and nurses. I was also able to personally contribute to the group by providing a Domestic Violence Guideline that one could use when interviewing patients that I had obtained here in North Carolina.

Next, I was directed to the Villa La Cruz school where I participated along with nurses in measuring and recording height and weight measurements for children in Kindergarten through 6th grade as a national effort to analyze trends in health and nutrition. I was able to speak with teachers, administrators, and students and learned about the logistics and obstacles of such efforts. One student interaction showed me the power of MOSAFC and its ability to provide that line of care at the community level all the way up to specialized care in the capital of Nicaragua. Essentially, I was flagged down by the school principal who wanted to know if I would be able to see a specific child that they had concerns over named Emmanuel. We talked in the presence of the school principal and based on social history and what I could observe, I recommended that he be seen by his community physician. The principal related how they had asked the mother to come in beforehand to speak with her about what they saw at school but agreed with other administrators that it might be time to make the next step and to go to her home. I would see Emmanuel again three days later while shadowing in the inpatient unit at Victoria Motta Hospital.

Next, I then started my shadowing/observing at Victoria Motta Hospital under Dr. Ishmael Carranza and Dr. Ivette Molina. I absolutely was thrilled with all of my time in Pediatrics at Victoria

Motta. In the mornings, I was allowed to sit in on Attending/Resident/Intern meetings, Case Reviews, and Special Topic Instruction. Immediately after, I would go on rounds with multiple Attending Physicians in different sections within the department, including the Emergency Pediatric Unit, Diarrheal Unit, Febrile Unit, PICU, NICU, etc. As related previously, Emmanuel entered the Pediatric Unit early one evening. The intern and I worked together to get a thorough history and we worked through a detailed physical exam together. This occurred with other patients that would be admitted into the hospital. Every day I would be attached to a separate unit where I was able to observe and see how physicians interacted with patients and issues pertinent to social, economic, and mental issues. However, I would always be sure to check in on Emmanuel. As much as I could, I would spend time visiting with patients and talking with them about their time and experience in their communities and with the health system. It was here that I learned how to better understand and try techniques in solidifying rapport with patients and how to encourage parents through their children in ensuring that they are also seeking care for themselves when necessary. Other highlights include observing a Cesarean section and the neonatal exam in full. Additionally, I spent an afternoon in the Maternity Ward where I was able to round with an Attending Physician and Intern in a pimping session. On my final morning of rounds, I immediately went to see Emmanuel and his Mother first. During that time, I learned information that I reported to the attendings who were not told by the Mother. The reasoning behind not telling the Physicians was that Emmanuel wanted to go home and asked his Mother not to say anything. He felt that something was really wrong and he just wanted to go. It was obvious in this conversation that his Mother was also very scared but she trusted me. In hindsight, this was exact reason and moment of why I had gone to Nicaragua in regards to learning how to care for children and reach their parents in the process. I was happy and ecstatic that Emmanuel's Mother would want to tell me due to the relationship that I had built with her son and her. Follow up tests were ordered and I left on my last day praying that his test results come back negative. During a follow up call, I learned that Emmanuel was transferred to a unit in Managua, Nicaragua at their Military Hospital and their most specialized hospital.

Finally, I conducted my Service activity. I had spoken with the Health Center, the Post, and Victoria Motta Hospital physicians and staff to see if there were service projects where I would be able to assist and provide funding and my personal touch in that funding as previously discussed in my request. Unfortunately, there were no projects that were directly under way that served the people directly. The one project that I could have worked on in support of the Health Center was in providing necessary items to equip their new emergency inpatient dorm, which was in need of items such as curtains, blankets, trashcans, and other similar items. However, I really felt that one of my primary objectives was to conduct a service event. Therefore, I independently organized, coordinated, and executed a service event at the most impoverished community in Jinotega: The Trash Community. Ten days in advance, I conducted a reconnaissance of the community. Preparation of a planning list, budget, purchase of materials, and transportation arrangement occurred 3 days in advance. The day went flawless. Ten bags remained and due to my knowledge of the city in terms of the epidemiological observation that I did at the Health Center, I then went to one of the poorest neighborhoods, Omar Pomares II, and was able to pass out supplies their as well. Both communities were very appreciative and I learned a great deal about organizing and conducting a service event with health, wellness, and building bridges in mind as the focus.

Stateside, I heard from my host family that Emmanuel had been at the hospital in Managua for over a month and was being seen by multiple specialists. However, he was discharged after specialized

care. He communicated with me via a voice memo just to say hello and that he wanted to send me a picture so that I could see how he was doing.

I accomplished everything I set out to do for my Summer Enrichment and did so under budget. I'm so thankful for this opportunity and wish the Brody Family the very best for their continued support of the Brody Scholars. I am positive that this experience will reflect in my future conduct as a physician.

Best Regards,

Bryan Morales