Hannah Mumber Foundation for the International Medical Relief of Children Las Salinas, Nicaragua Summer 2016

There is something exceptional about Nicaragua. While every nation has its bustling cities and picturesque countrysides, the simplistic beauty of Nicaragua never ceased to amaze me. As I sat in the front seat of my driver's truck on the day of my arrival, I looked out the window at the pastoral scenery. All I knew was that we were en route from the energetic capitol city of Managua to the small town of La Virgen, where I would be dropped off at my homestay to meet my host family. As we drove farther and farther away from Managua, the paved streets turned into a stone pathway and then finally into a long dirt road. Cows, pigs, and dogs roamed freely along the streets, while chickens peeped their heads into the doorways left open to ward off the oppressive heat. My host home was on the public water system, but we only had running water from four to eleven a.m. Because I come from a typical suburban home, this was very different from anything I had ever experienced. Yet, my anxieties faded after being welcomed so enthusiastically by my host family and, after only a couple of days, I adjusted to the differences and felt at home in this very different world.

At the clinic run by the Foundation for the International Medical Relief of Children (FIMRC), I had the opportunity to expand my knowledge of healthcare in a global setting. The organization aims to provide preventative care and treatment to both pediatric patients and women. The Project Limón site in Las Salinas, Nicaragua focuses heavily on public health, providing an excellent work experience for anyone interested in the implementation of global healthcare. By concentrating on preventive care and education, FIMRC seeks to provide its patients with improved long-term health outcomes. Each day, my fellow interns and I would participate in various health education outreaches and clinical activities. Furthermore, each intern at FIMRC was required to design a new project to assist the clinic and its patients in some way. To start off, I observed each of the programs so that I could learn about patient needs before deciding on the focus of my project. I accompanied the clinic's nurse Reyneri on inhome diabetes consultations, where we gave chats or "charlas" about how to control their disease and took blood pressures and blood glucose levels. Additionally, I accompanied Jessica, our RN and site supervisor, on in-home prenatal check-ups, speaking with the expectant mothers about how to best prepare for childbirth. Our final type of home visit was malnutrition check-ups. I often accompanied Jessica and our pharmacist (my host mom!) Esnaida to the homes of malnourished children to take their vitals and give advice about how to improve their vigor. In addition to our home visits, we helped with a developmental program called Los Pipitos, where children with Cerebral Palsy, Downs Syndrome, and Attention Deficit Disorder would receive physical therapy and assistance with schoolwork. These programs occupied the majority of our mornings. During the afternoons, the pediatrician and gynecologist would often come and I would assist in the patient checkups by registering patients, shadowing the doctors, taking vitals, administering developmental exams, and working in the pharmacy. By the end of my first two weeks, I had gained a sense of how I could construct a project to aid FIMRC's needs.

As interns, we devoted an extensive amount of time to our individual projects during any free time when we were not assisting in one of the FIMRC programs or patient visits. While one of the original reasons I chose to work with FIMRC was my love for kids and future plans to become a pediatrician, I saw a greater need to assist with the prenatal population. The population of Las Salinas warrants a greater focus on prenatal healthcare: mainly low-income families with large numbers of children. High birthrates are due to many factors, such as strong Evangelical and Catholic beliefs, attitudes of machismo, and limited education. A striking twenty-eight percent of the women give birth before age eighteen and about half of the women give birth before age twenty. Additionally, since most women have limited access to healthcare, there are high rates of pregnancy complications. Given these factors and the lack of data assessing FIMRC's new prenatal program, I decided to work with two other interns on a research project to determine the effectiveness of the FIMRC program by comparing pregnancy health statistics before and after its implementation.

The purpose of my project was to educate and assist expecting mothers as well as to ensure that the best care is administered to FIMRC's prenatal women. From our research, I hoped to assess the effectiveness of the prenatal program, compile the statistics into a report that highlighted the program strengths and weaknesses, and to determine needed adjustments to the program. The methodology of my project entailed determining the two project populations by sorting through the lists of patient names at the nearby health post and in the FIMRC database, locating the patient files at the health post, collecting data from the pregnancy charts, and conducting statistical analysis. All factors showed a positive trend, such as a decrease in UTI frequency, an increase in average baby birth weight and normal child exams, and an increase in the average birth age of the mother. Two factors, an increase in hospital births versus home births and a decrease in miscarriages, were statistically significant. These results suggest that, through its prenatal education and importance placed upon giving birth in a hospital, FIMRC has significantly decreased the number of home births and increased the number of hospital births. Likewise, FIMRC significantly decreased the number of miscarriages in the community by increasing pregnancy health education and accessibility of gynecological services. Overall, our findings confirmed the effectiveness of the FIMRC program and the need to recruit more women in the community into the program as well as to continue stressing the importance of proper nutrition and exercise during pregnancy. During my last two weeks, I worked on improving the FIMRC prenatal program by creating a breastfeeding *charla* to give to the women in the program who are in their third trimester of pregnancy. While I was spending time observing and doing research on the prenatal program, I noticed that many women chose to give their babies formula over choosing to breastfeed. Many believed that, since it is the more expensive option, formula is better for babies. My charla aimed to teach the mothers about the benefits of breastfeeding and to demonstrate breastfeeding techniques. I felt that this breastfeeding charla was a nice way to supplement my prior research.

Just as I quickly adjusted to the Nicaraguan lifestyle, I adapted my initial expectations of what my work in the clinic would entail to better suit the organization and community needs. During my time working in the clinic, the other interns and I aided every FIMRC program so that each could be operated smoothly. Yet, I believe that I contributed the most to FIMRC through my research project. Given the patient population and lack of statistics, FIMRC's prenatal program was the obvious choice for my project focus. My project was successful in demonstrating the current effectiveness of the program and uncovering needs for a future course of action. While I hope that my work left an impression on the clinic and the community, I know that my experience in Nicaragua certainly left an impression on me. Not only did I gain new medical and global healthcare knowledge, but I also gained more insight into myself as a person. As a result of my summer experience, I feel better equipped to adapt to new situations and relate to people of a different culture. My time working for FIMRC was one of the most rewarding experiences of my life, and I know it will not be long before I return to the beautiful country that is Nicaragua, my second home.