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Creating Nutritionist Software to Aid a Poor Community in Northeastern Brazil

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Virgem dos Pobres is an impoverished community on the banks of lake Mundaú in the Brazilian state of Alagoas. Its dirt roads are lined with houses made of mud and plaster, and sewage is disposed of by means of an open canal that runs through the community's center. The neighborhood's population is afflicted with many of the diseases common to extreme poverty: bacterial infections like impetigo, malnourishment, measles, mumps, etc. It was a great privilege to be able to work in some small way to help these wonderful people.

As a volunteer in Brazil I worked with local nutritionists who were studying this community's diet, particularly the diets of the neighborhood's diabetics. We went door to door visiting those who had placed their names on the local clinic's diabetes registry in order to verify that they were following the doctor-prescribed regiment. That data was then compiled and used to guide local doctors in giving more reasonable recommendations to the diabetics of the community.

Aside from aiding these nutritionists with their data collection, I also shadowed the doctors of the local community clinic. It was truly fascinating to watch them diagnose and treat their patients. I remember one particular instance when they called me into a separate room to view an infant. The body of the poor child was covered in impetigo, a bacterial infection that can be easily contained through proper medication. Though I personally could do nothing to help the little one, my heart reached out to him, and I felt my decision to pursue a degree in medicine once again confirmed.

Aside from volunteering in the local community clinic, I also had the opportunity to shadow doctors at the emergency room. It was fascinating to see how they treated their patients. A sink had fallen on one man's finger, nearly severing the tip. I sat and talked with him, trying to comfort him in his pain. The local doctors assured me that they could teach me to do stitches, and I was rather excited about the idea, but after giving it some thought I decided that offering medical treatment without the appropriate medical degree would be unethical. Nevertheless, I was able to contribute in little ways by aiding and conversing with the patients.

My trip's main focus was to develop nutritionist software to aid scientists in their study of the Virgem dos Pobres community. Upon arriving, I immediately saw the need for software not only to aid the nutritionists at the university, but also to aid the doctors at the local, government-run clinic. They needed ways to catalog their patients and track their medical progress. I set to work developing PostoNet, a program that performs a number of medical functions including patient cataloging, maternal weight determination, and medicine inventory tracing. I am assured by my colleagues in Brazil that my software is being used both in the Federal University of Alagoas as well as in the local clinic where I volunteered. With the software I created, scientists and doctors are better able to study the Virgem dos Pobres community, thus enabling them to adapt their techniques to better serve the community's special needs.

I encountered many unique difficulties as I tried to develop my medical software. They say that the one good thing about Mussolini is that he made the trains run on time. How unfortunate that he was born Italian instead of Brazilian! Nothing seems to work correctly in Brazil! I often traveled forty minutes to the university to work on my software, only to learn that the Internet wasn't functioning or there was a local blackout. Nevertheless, I was persistent, and little by little was able to finish the project before returning to the U.S.

Aside from these medical-related projects, I also participated in a number of other activities. One woman from a poorer community was setting up a book rental store, and I volunteered to create the cataloging software she needed to keep track of her books. I have considered adapting that software for use in Prison libraries in the U.S., though I have yet to contact the necessary officials to learn of their specific needs.

While in Brazil I began dating a young lady named Taciana da Silva Pontes. We were married two weeks ago in the Salt Lake temple. What a productive internship! The ORCA scholarship will not be soon forgotten in the Durrant household!

My experience in Brazil was remarkable. Aside from participating in a number of medical-related projects, experiences that not only brought me tremendous personal satisfaction by that will serve me well when I apply to medical schools next year, I also cultivated my love for the Brazilian people and my resolve to pursue a career in medicine. I am grateful for the opportunity ORCA provided me and hope to be able to apply this experience as I go forth and serve in my chosen career.