Observed Differences in Medical Recording Systems between Bolivia and Tacoma,



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Goals

- Learn more about the medical field through rotations in the medical system in a Bolivia
- Practice cultural humility through exposure to Bolivian culture, through classes and living with a local family in Tarija.

Background

- Bolivia is located in South America with a population of 11 million people (Allbery, 2020). The specific city that the program took place in is Tarija.
- Bolivia is an underdeveloped nation that historically has struggled with poverty. This has led to many of the citizens lacking healthcare coverage.
- In 2019-2020, a new form of healthcare was implemented. This form of healthcare is called the Unified Health System. This provided free healthcare coverage to 6 million uninsured citizens (Allbery, 2020).





- Figure 1A: The location of Bolivia in relation to the rest of South America. It is located below the equator and is landlocked in South America (Bolivia, c2024).
- Figure 1B: The regional hospital, San Juan de Dios. This is where all my observations about the medical system in Bolivia occurred (Gallardo, 2022).

Activities

- I visited Bolivia in the summer of 2022 for 2 weeks.
- The regional hospital where I did my rotations was called San Juan de Dios in Tarija. This was the largest hospital in the area.
- This work was all possible thanks to our local community partner, the Child Family Health International, (CFHI).
- I was assigned two different rotations during my program. The first rotation was in the operating room. The second rotation was in the maternity ward. The rotations lasted from 8 am 12 pm Monday through Friday. The rotations allowed me to observe how medicine is practiced in this hospital and interact with Bolivian medical students. I also got to see how different surgeries were performed and how surgery teams interacted.
- I had lunch with my host family at 1 pm every day. In Bolivian culture, this is the largest daily family meal.
- After lunch, I had Spanish classes with other students that were participating in this program. The class was held in a classroom environment and frequently had field trips. This included museums and culturally important areas like churches.
- We were allowed to explore local landmarks on the weekend by ourselves or with tour groups through our local community partner, CFHI.



Figure 2: The saint of Tarija, San Roque. Each city in Bolivia has its own patron saint. The saint of Tarija, San Roque, is famous for his close relationship with dogs. According to local legend, he was saved from death by a dog. He had leprosy and was at death's door. He was immobile and was starving to death. A stray dog then came up to him and gave him food, which saved his life. He was then known for being benevolent to animals and is almost always depicted with a dog by his side. Due to this, the locals were extremely kind to stray dogs and would give them flower crowns and would feed them.

Take Aways

- The first thing I learned was the realities of working in the field of medicine. I had not seen a surgery in person before my rotation in the operating room. This showed me what a career as a surgeon would look like first-hand.
- Practiced cultural humility, it was amazing seeing how another country operates and be a part of their cultural/historical values.
- The program showed me a different perspective on medicine and life that would be difficult to find without leaving the United States.
- I got to observe solutions to problems that I have seen in the American medical system as a scribe, such as getting medical coverage. In America it is difficult to get things like MRIs or certain medications approved by medical insurance. However, in the short time I was in Bolivia, I did not notice any issues with medication and imaging coverage. This is due to Unified Health System in Bolivia.
- I also noticed the American medical system is more efficient due to electronic records. Bolivia used paper records which made it more difficult to access old medical records for various reasons that will be discussed more in depth.
- This program changed what I would consider an "optimal" health care system and it showed me that improvements to current healthcare systems are possible in Bolivia and America. An approach similar to Bolivia's Unified Health system would improve care for patients in America.

Technological Differences

- San Juan de Dios did have sufficient diagnostic technologies, like imaging technology. However, there was a massive gap in technology when it came to medical record keeping. Medical charting in Bolivia was done on paper.
- In the United States, all medical records are maintained online. This means that you can easily access past patient records from your own institution and others online. This plays a large role in health care. I worked as a medical scribe in Tacoma, Washington at the Northshore Family Clinic and the majority of medical decisions were made by taking the patients history into account.
- According to Bolivian medical students, all of the medical paperwork is put into storage bins and is practically unused. This is due to doctors being too busy to access records when patients revisit the same facility. If a patient visits a different facility, then their medical records will not be there. This leads to more work for patients and doctors.
- Doctors have to spend more effort on new and existing patients due to lack of medical records. However, despite these limitations, Bolivian doctors work hard to treat patients and save lives.





Figure 3A: A file room filled with paper documents. Based off the description given about the storage rooms in the San Juan de Dios, this is what the storage room would look like. It is overfilled and difficult to navigate (Medical Records, c2019). Figure 3B: A basic image of an electronic medical system used in the United States. All of the information that is showcased in A would be accessible from any laptop that has access the medical record system in the United States (Ijaz, 2021).

Difficulties with Improving Medical Note-Taking Technology

- The biggest difficulty that is stopping the switch from paper medical records to electronic medical records is cost. This has been a difficulty that Bolivia has been experiencing since they switched to the Unified Healthcare System. They received about \$200 million initially. However, doctors have expressed needing about \$1 billion to hire more doctors and improve medical technologies (Allbery, 2020).
- Additional money would be used to improve technologies like electronic records systems. This would reduce the burden on the doctors and patients. This would also save money since doctors will no longer need to rediagnose a patient if they came from a different clinic or hospital.
- Hiring more doctors with this money would also reduce the burden on the health care system. As previously mentioned, with the change to United Healthcare System, 6 million people were granted access to healthcare. This has put a lot of strain on the system. This money could also be used to open more clinics so more people can easily access healthcare providers.
- Improving technologies and hiring new doctors would result in bolstering the infrastructure of Bolivian Healthcare and make healthcare more personalized and efficient. This would also reduce the burden of illness on the country.
- There are currently organizations that are trying to help reduce the burden on Bolivian healthcare infrastructure. Some non-governmental organizations have been working on providing materials and reach to rural areas. One organization is Global Links (Allbery, 2020). It has been estimated that they have reached 200,000 people living in rural environments that had difficulty accessing healthcare. Other non-profit organizations have been providing supplies as well. An organization called Mano a Mano has been shipping excess medical supplies to Bolivia from Minnesota (Allbery, 2020).
- There are other limitations as well, such as rural areas of Bolivia not having access to technologies like high speed wifi or laptops to use electronic records. This would also hinder the switch from paper records. However, lack of financial resources is currently the largest issue. Bolivia has struggled historically with poverty due to being colonized (Ewout, 2008).

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