

# OBSERVATION OF HEALTHCARE IN TARIJA, BOLIVIA

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## ABSTRACT:

During the Summer of 2023, I traveled to Tarija, Bolivia for three weeks through the Child Family Health International (CFHI) program to observe their universal healthcare system, compare it to the U.S. healthcare system, and immerse myself in Bolivian culture. Coming from a place of economic privilege, I wanted to see what the medical field and general life were like outside of the U.S. Studying abroad helped me overcome language barriers and see the diversity as I encountered different walks of life. I set goals to observe the health issues, quality of care, and local customs. Three clinical rotations were divided up by severity of patient condition and intensity of care. A neighborhood clinic focused on preventative care and simple patient consultations. A center specializing in treating Chagas disease in recurring patients. Lastly, a hospital where major operations occur. Despite the lack of resources, I saw the medical team make the most of their resources to improve their patient's quality of life. The patients are trusting and grateful and I aspire to be as caring and positive as the doctors there. I learned that there can be many treatments in observing the large Indigenous communities that value their traditional medicinal practices. The Bolivian healthcare system does not need elaborate technology to provide adequate care, but there is room for reformation. I took away experiences that improved my communication skills, broadened my mindset to new approaches, and increased my confidence to make me a well-rounded future healthcare provider.

## BACKGROUND:



### What?

- Bolivia is in Central South America
- Population: ~12,388,571 people  
71% urban & 29% rural (The World Bank 2022)
- Landlocked by Peru, Brazil, Paraguay, Argentina, and Chile
- Tarija is a Bolivia city in the southernmost department
- Tarija is known for their vineyards and production of wine and singani

### Bolivia's Universal Healthcare: (Ministerio de Salud y Deportes 2019)

- Sistema Unico de Salud (SUS) passed in 2019 - Law 1152 establishes free universal medical services
- All Bolivian citizens are covered from birth to death & covers all treatment plans for diseases
- Three tiers of aid: Primary, Secondary, and Tertiary
  - Primary is the smallest clinic. It has doctors, nurses, pharmacists, and dentists
  - Secondary has all the above but it also has specialty doctors and diagnostic services
  - Tertiary is the largest. It has all the above, but includes subspecialty doctors and surgeries are performed here
- Large emphasis on preventative care (ex: vaccines and birth control)
- Traditional medicine still very relevant due to the large Indigenous community

### My role as an observer:

- I shadowed doctors, lab techs, and nurses at three different clinics. Five days a week for three weeks
- Observations began at 8 am and ended at noon. Except for the surgery rotation. That started at 7 am and ended at 11 am.
- No physical interaction if it pertained body fluids but I could assist them in calling out patient names, listen to patients' heartbeats, lungs, ultrasounds, and hold instruments for doctors when they performed PAP smears

## GOALS AND EXPECTATIONS:

- I expected to see issues such as food insecurity that leads to other complications, high incidences of cervical cancer, and vector borne illnesses due to the warm climate
- Learn as much as I could about how they operate in their clinics
- Learn how to talk to/interact with patients
- Become immersed in the culture by eating the typical foods and learning Spanish

## OBSERVATIONS:

### Centro De Salud Nestor Paz – Primary Level

- Small neighborhood clinic. Patients needed a health insurance card to be seen
- Has one waiting room, two doctor checkup rooms, nurses' triage station, testing laboratory, and a restroom
- Nurses walked around the neighborhood giving out vaccines and formula to babies and vitamins/supplements to the elderly
- Doctors saw around 12-15 patients a day. The patient ages ranged from 6 months to 80 years old
- All patient history and information were in physical files the nurses would set down on the doctors' desk
- Performed simple patient consultations → checked their lungs and heart, and pressed down on the patient's body to locate pain
- The most invasive procedure at clinic: PAP smears → the tools were thrown into a sanitizing bucket & doctors would set the test with hairspray and send it off to the lab next
- Doctors would write Rx forms for the pharmacy or fill out testing forms to refer patients to higher level clinics to receive further testing and aid
- The rooms would be wiped down after every visit by a janitor, and the doctors' room had one medical cabinet holding all their instruments

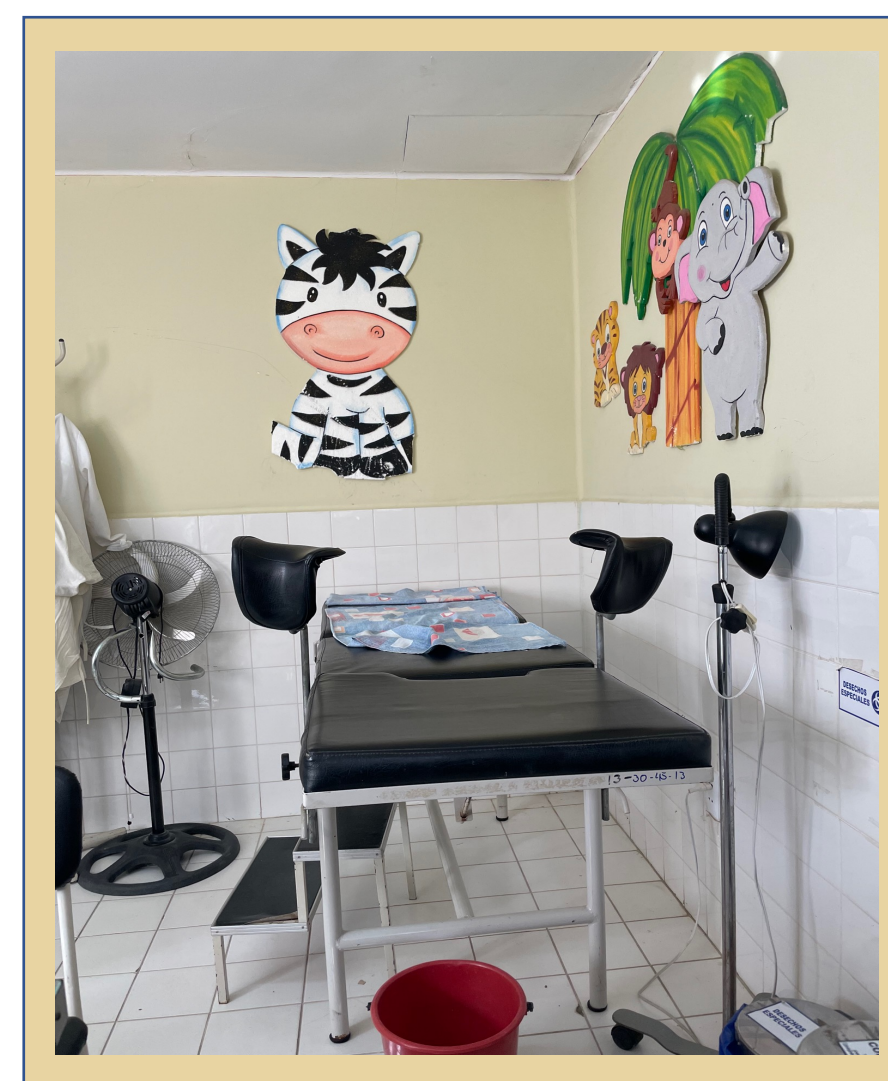


Image 1. Doctors room decorated for the kids at Centro de Salud Nestor Paz



Image 2. A student assisting one of the nurses at Centro de Salud Nestor Paz holding baby formula to hand out to the community



Image 3. Dra. Cecilia Reynolds and I in her office at Centro de Salud Nestor Paz

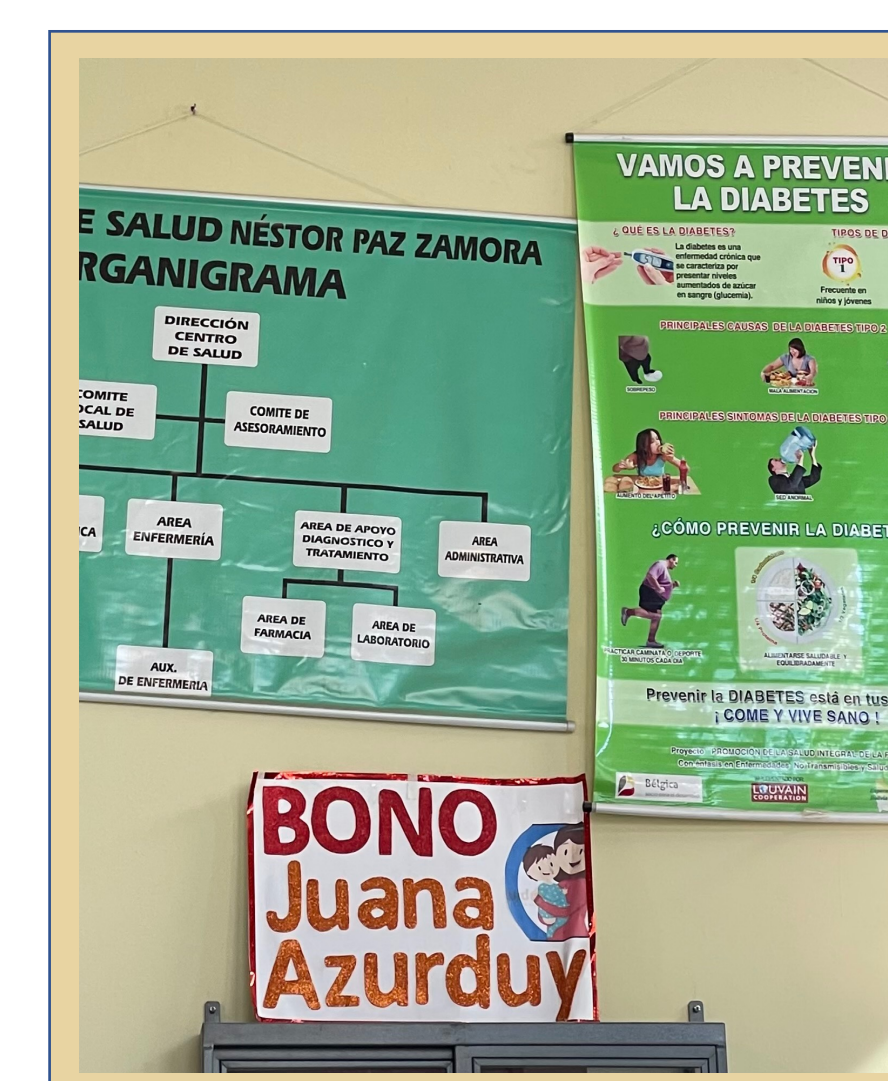


Image 4. Prevention and Informational posters are displayed all along the walls at Centro de Salud Nestor Paz

### Plataforma de Chagas – Secondary Level

- Specialized clinic focused in treating Chagas Disease → caused by parasite *Trypanosoma cruzi* → Acute and chronic phases → leads to cardiac and digestive system issues (CDC 2019).
- It had three doctors' rooms, two nurses' rooms, and one small laboratory
- Patient information were in physical files the nurses would set down on the doctors' desk
- Doctor saw 10-12 patients a day. Most were reoccurring patients going in for their monthly checkups. I interacted the most with the patients at this clinic
- Doctors performed simple patient consultations – asked questions such as if they had difficulty breathing or eating, checked their heart and lungs, and performed ECGs if the patient needed it
- Chagas medication possibly has adverse effects (ex: rash or vomiting). If adverse effects were present, Doctor would order treatment to stop. No adverse effects to Chagas medication means they can continue treatment plan.
- Bloodwork tested to see if patients were positive with Chagas → had a machine to test the samples called "Chagas ELISA"

### Hospital San Juan de Dios – Tertiary Level

- OR unit included 3 rooms for the attending doctors and resident doctors, one recovery room for patients, and five operation rooms (One dedicated to C-sections)
- Hysterectomies, Cesarian Section, Brain, Spinal, Lung Puncture Repair, Tumor Removal, Fractures, Chemotherapies, and many other surgeries were performed Small medical team – often main surgeon and their medical student, one nurse handling the sterile instruments, one anesthesiologist, and a medical assistant
- Had fabric shoe coverings and students reused hair nets
- Small clean up crew prepped room for the next patient by sterilizing the instruments, bedding, and aprons. Machines and floors were wiped down & sanitized.
- Operation room doors were free to enter and leave whenever by the medical team. No badge system in place. There was one security guard in the front entrance.
- Long lines formed out the door as patients waited outside to enter the hospital to see their desired department



Image 6. Myself, another student, and the program's medical director, Dra. Gamarra outside of Hospital San Juan de Dios Emergency room

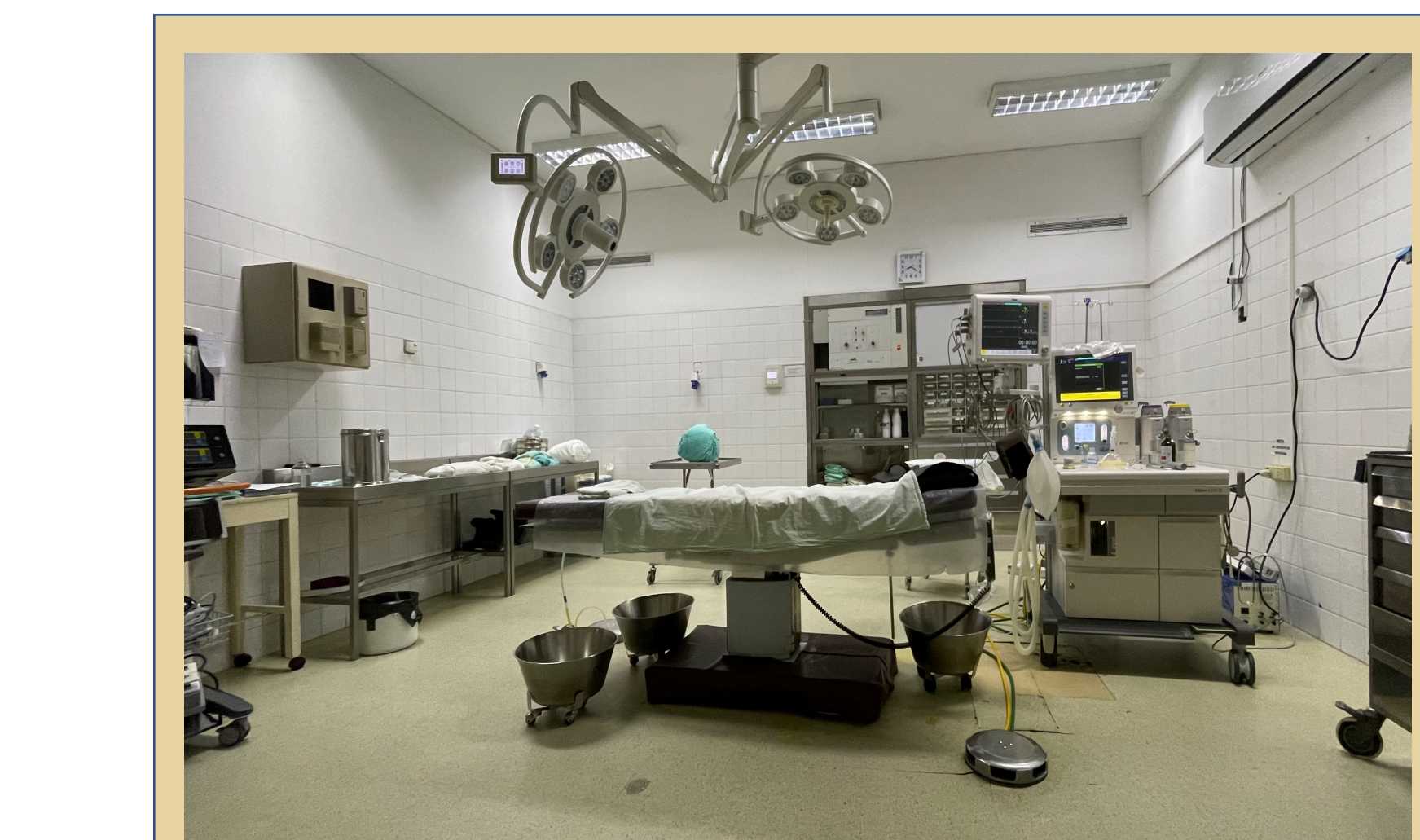


Image 7. One of the five total operating rooms at Hospital San Juan de Dios.



Image 8. Hospital San Juan de Dios Quirofono (operating room) medical cart set up. This cart held their anesthesiology medication and instruments.

## RESULTS:

- Doctors had limited resources (ex: hairnets, gloves, and X-ray machines) but were efficient and thorough with their care
- Basic patient consultations helped providers see more patients → On average doctors saw up to 12 patients a day
- The patients I saw were all covered by SUS because doctors would use their health insurance card to write down their ID number
- The nurses are one key factor in preventative care and in helping people who couldn't go to the clinic because they are the ones going around in the neighborhoods door by door providing vaccines and vitamin supplements
- Many young doctors because training process is shorter than in the US
- Patients were extremely trusting of the doctors
- Main issues I saw were muscle pain, diabetes, chagas medication adverse effects, fractures and cervical cancer. The doctors at the three hospitals respectively treated their patients well.
- Language barrier between myself and doctor did reduce amount of communication
- Interacted with patients and saw the behind the scene work in lab

## CONCLUSIONS:

- Across all three clinics I noticed that the medical team truly cares for their patients even though the consultations are quick, and resources are limited
- The clinics have the same technology we have in the States (ex: X-ray machines), but they don't have as much available decreasing or slowing down the amount of people receiving aid
- Showed me that I want to work with people face to face. I loved talking and listening to the patients. And seeing the relief they got after the appointment.
- Women and babies are prioritized the most on the list
- Preventative care is emphasized and is very important
- Language barrier did hinder my learning as I couldn't understand some of what they said but I am continuing my Spanish learning journey. Made me think of the States and how many people must experience communication problems and a language barrier
- The Free Universal Healthcare System in Bolivia is beneficial because it allowed doctors to help people in the urban area who normally couldn't afford healthcare. Up in the Tarija mountains and there are less hospitals and smaller communities. Reformation is needed to help people in rural areas

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