# Resilience And Adaptability In Bolivian Healthcare Montather Almozani, Morgan Heinz

University of Washington Tacoma – Biomedical Sciences Abstract

Access to healthcare services is a fundamental aspect of societal well-being, yet disparities in accessibility persist globally. To further understand this topic, we travelled to Tarija, Bolivia for four weeks through the Child Family Health International (CFHI) program to observe their universal healthcare system. By exploring the similarities and differences between the Bolivian and US healthcare systems, areas for reflection on potential improvements and policy considerations to enhance healthcare equity can be identified... Through various resources provided by CFHI, our approach involved engaging in three distinct clinical rotations. These rotations encompassed diverse healthcare settings, including a tertiary hospital catering to complex medical interventions and surgical procedures, a community clinic specializing in preventive care and basic consultations, and a specialized center focusing on the management of Chagas disease among recurrent patients. Our analysis revealed notable disparities in healthcare infrastructure, resource allocation, and accessibility between Bolivia and the United States. While both countries face challenges in ensuring equitable healthcare access, Bolivia's healthcare system exhibits greater structural deficiencies and limited access to specialized care compared to the United States. The adaptability and resilience of Bolivian healthcare staff in the face of these challenges were particularly noteworthy. This experience was profoundly inspiring, highlighting the importance of flexibility in healthcare delivery. The insights gained from this comparative study underscore the need for continued efforts to address global healthcare disparities and

# Bolivia Background

**Population:** Over 12.5 million (The World Bank 2022).

enhance health equity.

Universal Healthcare System: Sistema Unico de Salud (SUS) since 2019 provides free medical services to all citizens.



## Methods

- **Team Division**: Six UW undergrad participants divided into teams of two.
- **Schedule:** Shadowing medical professionals 5 days a week, 7 to 12.
- Week 1:
- Location: San Juan Dios Hospital.
- Mentor: Dr. Rojas, anesthesiologist.
- Activities: Observed medical procedures and took notes on anesthesia practices.
- Week 2:
- Location: Plataforma de Chagas, a research institute.
- Activities: Participated in research related to Chagas disease, observed blood sample analysis, and gained skills in patient consultations.
- Week 3:
- Location: Centro De Salud Nestor Paz Primary Level
- Activities: Shadowed nurses administering nutrients and vaccines to children under five, conducted door-to-door visits.
- Observed regular health check ups and verbally interacted with patients.
- Spanish Classes were provided to enhance medical terminology knowledge.

# Interactions and Observations

- General equipment in healthcare settings are not up to par with US equipment. The mobile X-Ray machine for example malfunctioned 3 times during two different surgeries. As a result, healthcare providers in these settings often face challenges in ensuring the reliability and functionality of essential medical equipment. Workers were ready for this and acted without second thought to ensure the best possible care for every patient.
- We were only stopped and questioned twice at San Juan de Dios major hospital, compared to US hospitals I've volunteered at where I was stopped at multiple checkpoints.

### Surgery:

Ο

- Observed a maternal death due to high blood pressure and inadequate measures during a shift. Ο
- Presence of many medical students observing surgeries. Ο
- Some students were scrubbed in and ready to become the surgical first assistant. Ο **Consultation Visits:** 
  - Efforts made to ensure patient comfort; (Fig 5)
  - doctors spoke slowly and clearly.
  - Honest and realistic responses to patient questions.
  - Doctors and institutes considered in feedback and evaluations

### **Chagas Institute:**

- Staffed by three doctors and one lab technician with limited equipment. Ο
- Usually receive test results in second or third visit. Ο
- Maximum 20 patients per day per doctor. Ο
- It is very common for medicine to be pre-contaminated from factories, and at least 2 out of 30 Paracetamol liquid solutions came infected.





Paracetamol discovered

Figure 1. Contaminated liquid



Figures 3 and 4. Comparison of operating room in San Juan Dios Hospital (Left) and Ohio Valley **Surgical Hospital** (Right)





**Figure 5**. Picture of me assisting nurses giving vaccinations



**Figure 6**. Entrance to Plataforma de Chagas



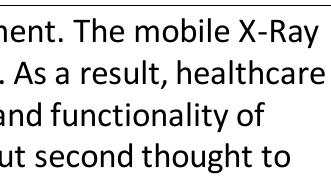


Figure 2. Dr. Rojas, Elizabeth, and I right after a successful operation

Figure 7. Urine and test samples for the Chagas disease

### Results

- Laboratory Observations: We observed the operations within hospital laboratories, noting the procedures for diagnostic tests and ongoing research efforts.
- **Resource Limitations:** Limited resources and infrastructure were evident, particularly in rural areas, where access to basic medical services and equipment was notably lacking.
- Public Health Challenges: We observed public health challenges including the prevalence of endemic diseases, nutritional deficiencies, and inadequate sanitation.
- Access to Care: Specialized care more restricted in Bolivia; rural patients travel long distances for treatment.
- **Cultural Competence and Patient Interaction:** Greater emphasis on cultural competence and community involvement in Bolivia; more personal patient interactions.
- **Clinical Rotations:** Through clinical rotations, we gained insights from local physicians, residents, medical students, and nurses across various wards including obstetrics, oncology, inpatient care, infectious diseases, nephrology, and disabilities.

# Conclusions

- Our team observed that Bolivia's medical practices, while different from conventional Western standards, are characterized by the dedication and resourcefulness of healthcare professionals.
- Bolivian healthcare workers face challenges such as limited resources and endemic diseases, yet they exhibit remarkable resilience and adaptability.
- This experience broadened our understanding of global healthcare disparities.
- We gained a deeper appreciation for the importance of cultural competence and collaboration in delivering effective healthcare interventions.
- I personally have erased my doubts about my pursuit of the medical field and will use the many workers I encountered as my guideline.

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