

## Reflections on my Global Health Rotation at Haydom Lutheran Hospital Krishna Patel

In preparation for my time in Tanzania, I attended multiple debriefing sessions and spent countless hours researching the cultural climate and healthcare system of Tanzania. However, two days into my rotation, I soon learned that no amount of research and planning was sufficient to prepare me for my time at Haydom Lutheran Hospital (HLH).

I spent one month rotating through the medicine wards and ICU wards—specifically working on the female side. I also had the opportunity to spend time in the Outpatient Medicine Clinic and go on two outreach trips to the surrounding remote villages to administer vaccines. Through these experiences I gained a broad understanding of how the healthcare system in rural Tanzania functions from hospital medicine to outpatient and remote clinics. By working with Tanzania interns, attendings, pharmacists, and nurses, I obtained a deeper appreciation of how patient care and team structure varies in the Tanzanian healthcare system.

My days began with morning report—where interns would report on new admissions, deaths, and transfers. After morning report, I attended Sala, which is a morning prayer session that involves singing and dancing. Though I could not fully comprehend the Swahili sermons and songs, I felt the strength of the community and the indiscriminating bond that existed between each team member. My day would proceed with morning ward rounds with the attending, Medicine interns, and nurses. During rounds, we went bed by bed using detailed histories and physical examinations to create a differential diagnosis and daily plan for each patient. In the afternoon, I worked directly with the interns following up on patients and new admissions. Each week, I prepared a teaching presentation for the interns that I presented during morning report. Notably, I created a presentation on thrombotic thrombocytopenic purpura based on an admitted patient that unfortunately passed away due to lack of availability of plasma exchange at HLH despite the existence of 6-bed dialysis center. Given that the medicine interns rarely did physical exams on the patients themselves, my other presentations were centered around teaching different physical exam maneuvers and what can be elucidated by different findings—such as assessing a patient's volume status via a jugular venous exam.

Overall, my time at Haydom Lutheran Hospital was incredible but also quite challenging for me. Within my first couple of days, I became overwhelmed by the countless challenges that the patients and health providers faced within their native healthcare system. Patients often sought care too late—at the point where they already suffered from avoidable complications—and even when patients sought care, they often had to forego certain diagnostic tests and imaging studies due to cost or lack of availability. Outside of the financial difficulties that the patients faced, their care was often marred with other sociocultural challenges.

During my third week, while I was attending the monthly local goods market, I received a call from my attending notifying me of a new consult we received from the OB/GYN Department—a 28-year-old young woman who presented with an extensive tetanus infection of her genital area. I quickly rushed back to the hospital, where the OB/GYN intern told us more about the

woman's medical history. Her husband, while heavily intoxicated, burned his wife's genital area with hot wood in a burst of anger, two weeks prior to her presentation in the ED. Unable to afford care or spare time away from her household/childcare duties, the young woman waited to seek care until the infection and skin necrosis was too rampant to manage at home. While I was fighting back my tears and an undeniable mixture of sadness and anger, my attending relayed to me that this was not a unique case in Haydom. Women suffered from domestic violence regularly and the culprits did not face any repercussions most of the time —both from law enforcement and from society. Unfortunately, the patient passed away as the infection was too extensive to be managed with IV antibiotics alone and there was a shortage of tetanus immunoglobulin at HLH.

This young woman's story and many others often left me questioning how the native interns, attendings, and nurses grappled with the higher rates of poor patient outcomes that stemmed from environmental and socioeconomic disparities. After my first couple of days on the ward, I was already emotionally and physically overcome by the number of patient deaths I witnessed. I gained a deep amount of respect and admiration for the HLH staff. Despite the astronomical challenges they faced, they continued to work diligently to provide care and support their patients.

One of my learning objectives was to develop an understanding of the difference in health disparities between HLH and my home institution. Apart from the obvious differences in physical environment and resource availability at HLH, patient education and self-advocacy was vastly different at HLH compared to at UVA Health. During my patient encounters at HLH, I realized health education and health literacy was often nonexistent—this, coupled with the financial and sociocultural burdens that patients at HLH faced, left patients struggling with management of their medical conditions. The lack of health literacy left patients with more severe forms of disease due to issues such as medication noncompliance. Alongside lower levels of health education, I noticed patients rarely advocated for themselves. They did not ask the attending many questions about their health condition and they seldom voiced concerns they had regarding their needs or personal preferences. This was quite different from the patient encounters I had at UVA, where patients ensured their voices were heard to maintain a level of control over their lives. Though my actions did not heavily impact the patients' health outcomes, whenever I saw patients, I attempted to center my care around the knowledge, culture, and financial capabilities of the patient.

Another one of my goals was to complete a cost-effectiveness analysis of current malaria control strategies in Tanzania using real-life patient experiences and learning more about existing infrastructure at HLH. Unfortunately, given that I traveled during Tanzania's winter season and the higher altitude of Haydom, no malaria patients were admitted during my rotation. I also learned that the prevalence of malaria at HLH is quite low despite my misleading pre-travel online research.

Instead of my completing a malaria prevention and control analysis, I decided to work on a presentation detailing the various departments at HLH and how the hospital operates self-

sufficiently in rural Tanzania for other medical students at UVA School of Medicine. I plan to use my experience at HLH to educate other interested medical students about the population that I served and the challenges the patients face while accessing care. By raising awareness of the health disparities that patients in international communities face, I hope students understand the differences in patient health statuses and healthcare systems in other countries and settings. I hope to educate students on the skills and knowledge that I learned from working at HLH. I plan to organize informal Zoom meetings to present valuable information that students need prior to traveling abroad to work in medically underserved areas such as Haydom, Tanzania.

I aspire to lead a career in global health and tropical diseases to work towards alleviating the unfair burden of disease that riddles global minorities. I left Haydom with a tangible imprint of what my future career could look like someday. Though I also left with uncertainties and many questions about the reality of being a practicing physician in tropical medicine in a foreign country, I am looking forward to building my knowledge and skills through experiences such as my global health rotation at HLH.