
accra

about

I spent February 2024 in Accra, Ghana, for a global health rotation at Korle Bu Teaching Hospital affiliated with University of Ghana Medical School. Both Ellelan and I came here together; she rotated on cardiothoracic surgery, and I spent my time on the internal medicine wards.

During the rotation, I penned down my thoughts and photographed select scenes. I created this magazine to preserve these observations and reflections.

FIVE DAYS IN

FEB 03

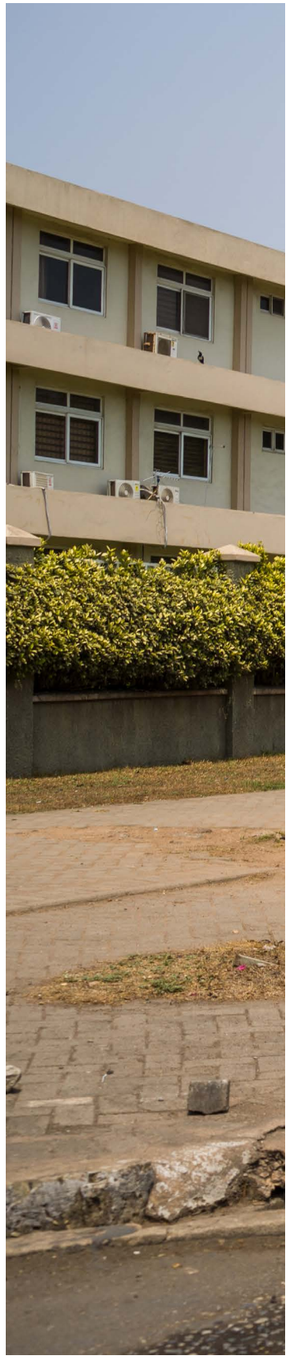
We arrived in Accra Tuesday night and spent the evening settling in to our place. Ellelan and I are renting an AirBnB near the Labone and La neighborhoods in Accra, which puts us about a 25 minute drive away from the hospital but closer to the downtown and beach. We're staying in a spacious two bedroom apartment on the second

floor of a three-story building, with another AirBnB unit on the third floor. Our neighborhood is densely populated with local everyday Ghanaians. Several stalls and vendors line the street, and we face an elementary school.

Week one in the hospital has been a bit touch and go as I adjust to the new environment and structure. The first day (Wednesday) mostly involved some paperwork and a mini-orientation. By the time I made it to the wards on Wednesday, I accidentally joined the house officers and junior residents (more on this later) for their rounds. I tagged along for senior resident rounds on Thursday with the same group. Then Friday, the Head of Department of Medicine informed me that I was rounding with the wrong group. She then placed me among a cohort of final-year medical students on the medicine wards and encouraged me to integrate myself in their daily activities instead.

I learned that the educational system here is a bit different than the American structure. In the U.S., one typically does four years of

continued on next page



undergrad, then four years of med school, followed by residency and possible subspecialty fellowship. Here, med school starts immediately after high school but lasts for six years instead. After graduating, you train as a “house officer” for two years, during which you rotate through internal medicine, ob/gyn, surgery, and pediatrics. Following this house-job, you work as a medical officer (or “MO”) for one to two years before eventually applying for residency in your chosen field. In internal medicine, “junior residents” train for 2-3 years and then have the option to further specialize in a clinical specialty (e.g., cardiology, nephrology, etc.) as a “senior resident” for 2-3 more years. Upon completion of senior residency, you finally become a consultant. Previously, I thought that the Ghanaian system for becoming a doctor was shorter than the American system since med school starts earlier, but I can now appreciate that it’s essentially the same overall time, if not longer.

Despite these structural differences in medical education, there are still many parallels between American and Ghanaian roles. For example, house

continued on page 8

officers and medical interns seem to share fairly similar responsibilities. However, final-year Ghanaian medical students here apparently have fewer clinical responsibilities compared to their American counterparts. Clinical experiences for final-year Ghanaian students more closely resemble the curriculum for third-year American students on clerkships rather than fourth-year American students on sub-internships. This amounts to more observation. It seems that Ghanaian medical trainees build direct patient care experience after school with their stringent requirements for post-graduate clinical training before starting residency (e.g., house-job + medical officer duty). As I was directed to spend time with the medical students as opposed to the house officers and residents, I am curious how much clinical exposure I will have. My impression is that there will still be opportunities to see interesting cases, but I may have to take some initiative to seek them out. If possible, I'd like to see some complex infectious disease presentations and cardiology practices.

Outside the hospital in our

time off, we've been trying to explore Accra. We have yet to establish a routine since every day has been so different, but it looks like we will get to work early in the morning and leave mid-afternoon. See below for some scenes from Korle Bu and life in Accra so far. the medical students as opposed to the house officers and residents, I am curious how much clinical exposure I will have. My impression is that there will still be opportunities to see interesting cases, but I may have to take some initiative to seek them out. If possible, I'd like to see some complex infectious disease presentations and cardiology practices. ■

HARMATTAN

FEB 08

The air quality in Accra currently ranks as the worst in the world right now, reaching over 300 AQI this week. Just walking outside for a few minutes leads to a sore throat and watery eyes. Pollution paints the sky a flat concrete grey, erasing away the clouds and rendering the sun into a wispy orange-red orb. I learned from one of my classmates that this haze develops sporadically but occurs commonly throughout Harmattan, a dry season characterized by dusty winds. Apparently, Harmattan typically happens in late December to January, but changing weather patterns in recent years have pushed the timeline out to February.

I'm glad I got to experience Accra this past weekend before Harmattan really kicked in. Although we neglected to hit the main tourist sights (there's still time), we explored more of the food & going out scene. With all the new changes already, I think we lapsed into autopilot and effectively just recycled our classic city weekend playbook: kicking things off with a Friday night dinner, followed by a late night out, then a slow Saturday for recovery, and capped off with an extended Sunday lunch. By doing the same things I do anywhere else, I feel like I got to understand the pulse / character of the city. Accra reminds me a lot of New York. There is so much to do, with potential activities spanning a large spectrum of how much you

continued on page 14

can spend. The scene Friday night could have been plucked right out of midtown Manhattan — if you swapped out all the usual white people for Ghanaians. The same could be said for Sunday lunch at SandBox beach club, where we unintentionally ran into friends from college and some other American medical students.

This week in the hospital, I joined my assigned team of final-year medical students and participated in their daily morning clinical activities. On Monday, all the trainees on the floor rounded together. One consultant (i.e., specialist doctor) led rounds for a massive group of students, house officers, junior residents, senior residents, and some pharmacy students. I was struck by the high ratio of learners to patients; our group of 25+ saw just 5 patients. With this rounding experience, I appreciated how it may be hard to stay engaged in such a saturated learning environment. At times, it was hard to follow even if I spent all my energy on trying to listen. Medical wards at baseline are already a chaotic environment. Imagine the cacophany when you add on a 25 person flock hovering around a

continued on page 16

single patient bed.

Throughout the week, I consistently noticed the strong emphasis placed by Ghanain doctors on building good hisory-taking and physical exam skills. On Tuesday, I went to cardiac wards with the med students for a review of the cardiovascular exam. A similar session for the abdominal exam was held on Wednesday morning. In both settings, one student would perform the exam and narrate their findings aloud, while other students would weigh in for feedback and the instructor would highlight critical teaching points. Back in the U.S., I'm used to clinicans breezing past the physical exam, hurriedly placing their stethoscope on a patient's chest for a few seconds just so they can document "RRR" (regular rate and rhythm) for the electronic health record note. Meanwhile, I've been seeing doctors here palpate the chest wall, meticulously measure the liver after tapping on the abdomen, and listen to the spleen (!) with their stethoscopes. One consultant explicitly commented on this attention to detail, remarking that their low-resource health system demands excellence in such techniques, unlike the

U.S. where "doctors can just order any tests... if insurance pays for it."

I've enjoyed spotting the differences in disease presentations seen here compared to back home. It feels like I've entered a parallel universe, where the medicine is still the same but the likelihoods are vastly different. While brainstorming possible diagnoses for an elderly man with pulmonary symptoms, unintentional weight loss, and back pain, one resident speculated that our patient may have Pott's Disease (tuberculosis of the spine). At first, I was confused as to why the resident had made such a leap before even considering malignancy. In my own limited experience, I had never seen Pott's Disease land a spot at the top of a potential diagnosis list. But in a region with high tuberculosis burden and relatively low tobacco smoking, the odds of seeing later-stage tuberculoid disease become more serious considerations. In another patient encounter, I came across a middle-aged woman with thyroid disease. During a discussion on potential etiologies, I found out that iodine deficiency ranks highly as a common cause for thyroid

continued on page 19

disorders here. Over the years, the Ghanaian government has implemented policies (starting in the early 2000s) to increase salt iodinization. Although these programs led to significant improvement, iodine deficiency still remains an important concern to keep in mind.

In general, I have tuned in so far on the similarities and differences here vs in the U.S., keen to find the ways in which environment shapes the practice of medicine. This compare & contrast framework has felt like the most natural strategy I could use to understand such a new setting. In the coming days, I'll try moving beyond this lens and offer some more reflections in my next post. ■

PAY TO PLAY

FEB 16

“All clear? Everyone clear?” After a quick glance around the room, the cardiologist places the paddles on our patient’s chest and administers 90 J of electrical energy to her heart. “Ahh!” The previously silent, motionless patient yelps. We all glance over to the monitor screen, waiting for the irregular

heart rhythm to change. Nothing happens. “Let’s go up to 120 J and try again.” A senior resident dials up the knob to fulfill the order. Paddles go back on the chest. “All clear? Everyone clear?” Another shock. Another yelp. But this time she momentarily wakes up, blearily mumbling “How many shocks was that? I only paid for one…“ Before anyone can respond, the anesthesia kicks back in, resuming her slumber. The monitor still shows atrial fibrillation. Dismayed, we remove the paddles and pack up to prepare for the next patient.

To be fair, I don’t think that patients pay for each individual shock administered rather than simply the entire cardioversion procedure. Still, I share this anecdote from this week to illustrate a broader theme I have observed: that patients here are very conscious about their itemized healthcare costs. Many Americans also experience financial barriers to healthcare access, and I don’t mean to suggest that this problem is unique to Ghana — just that it manifests in a different way.

Importantly, the payment

continued on next page

models for financing American healthcare differ from the Ghanaian system. The overwhelming majority of patients in the U.S. pay for healthcare through insurance programs (either private or public), which means that patients often do not directly see the individual costs for medical services they receive. Here in Ghana, patients instead typically pay for services on their own rather than through an insurance scheme. The national government does offer a public insurance program (analogous to the UK's NHS), although it covers relatively fewer benefits and remains underutilized (<40%) and underfunded. Very few patients use private insurance. Therefore, patients in Ghana are often both the users and payers of healthcare.

In the U.S., it feels like healthcare costs are the big elephant in the room during doctor-patient interactions. Doctors bill insurers, who in turn charge patients monthly premiums and co-pays. Even though everyone knows medicine is expensive, doctors (as the servicers) and patients (as the users) don't directly negotiate the cost of care.

In contrast, I have noticed here at Korle Bu that doctors and patients more readily talk about affordability and the cost-effectiveness of health services. During ward rounds earlier this week, a resident informed the consultant that our patient was unwilling to pay for additional diagnostic testing. He had presented with shortness of breath due to a large volume of fluid surrounding his lungs, and the team wanted to analyze the cells (i.e., cytology) in this pleural fluid to better understand the cause. The consultant acknowledged that cytology provide useful information but pointed out that we could still pick up important clues through biochemical testing, a much cheaper option. In this low-resource environment where patients negotiate their

continued on page 26

Cape Coast
On our last full weekend, we drove down to visit Cape Coast, where we explored the national rainforest and learned the gruesome slavetrading history behind Elmina Castle (or 'dungeons').

own medical care, doctors are forced to think creatively about cost-effectiveness, unlike the high-resource setting approach of just ordering “comprehensive” panels of often-unnecessary tests.

But thinking cost-effectively only works up to a certain point. Sometimes the only effective treatment options are still too expensive. I started seeing this phenomena more throughout the week as I got better acquainted with the cardiology fellows and faculty. Medications can control advanced heart disease to an extent, but effective management often necessitates the use of invasive diagnostic and interventional procedures. In some patients with active chest pain, cardiologists might perform a coronary angiogram — a standard cardiac procedure that uses a catheter and x-rays to image the heart’s blood vessels and potentially open up any blockages. One of the cardiology fellows informed me that patients pay 18,000 GHS (~$1,500 USD) here for a coronary angiogram. Placing a stent costs an additional 6,000 GHS ($500 USD). Meanwhile, the national minimum wage is currently 18 GHS (~$1.50 USD) per day. As

a result, many patients with unstable coronary artery disease are turned away simply because they cannot afford to pay. This same scenario holds true for many other patients.

One morning, I came in early to see a patient whom I had met the previous day with my classmates. Though the team was focused on the gastrointestinal exam at the time, I noticed this twenty-year old patient’s left chest was quivering, and I heard someone off-handedly mention that he had a heart murmur. This piqued my curiosity, so I decided to look into the cardiac aspect of his case. After arriving at his bedside that morning, I asked how he was doing and sought permission to do a cardiac exam. He replied that he was not feeling well. He shared with me that his doctors diagnosed him with endocarditis. They said he would need surgery to replace his heart valve, but the price was unaffordable. I listened to his heart, confirming what I suspected: a harsh, blowing murmur in the apex region that suggested severe mitral regurgitation. This patient had likely previously suffered from rheumatic fever, which damaged his mitral valve and led to his

continued on next page

current condition. I lingered for a while longer, hearing out his grievances until I had to finally return upstairs for the morning session. I felt uncomfortable as I left, knowing that I had just met a patient younger than me who might die not because the medical care did not exist, but because he could not pay.

As I reflect on the patients I met this week, I think about how disturbingly common it is for money to be a barrier for accessing healthcare, either here in Accra or back home in the United States. In this current era of medicine, it feels like the biggest problems facing us are not rooted in scientific complexity but rather in the operations of health systems. For this reason, I have dedicated my research throughout medical school to minimizing the financial toxicity associated with new medical products. I am optimistic that such systems-level work will eventually bring some relief to the scores of patients in the same situation. Even still, it's hard to walk away from someone in front of you without being able to help. ■