Samuel Asante Reflection Paper: Ghana

In 1998, Sub-Sahara Africa had an enormous disparity in the number of neurosurgeons per population (Khamlichi, 2014). There was a ratio of 1 neurosurgeon to a population of 6.3 billion. A paper published eighteen years later, in 2016, showed that the neurosurgeon per capita still remained at a record low at 1 per population of 3 million (Dechambenoit, 2016). According to this same paper, the number of MRI machines in Sub-Sahara Africa was 1 per a population of 25 million, a significant difference from 25 MRIs per a million in the western countries.

One of the leading neurosurgeons in Ghana, Dr. Tamekloe, reported to the local newspapers that as of 2016 there was a total of 15 neurosurgeons in Ghana (“Ghana has only,” 2016). These 15 neurosurgeons cover over 25 million Ghanaians. Not only do they cover Ghanaians but also they seem to have a catchment area that goes across all sub-Sahara West Africa and even sometimes East and Central Africa.

I had an opportunity to rotate at two hospitals in Accra, which is the capital of Ghana. The first being Korle-Bu Teaching Hospital which has six out of the fifteen neurosurgeons practicing in the country. Korle-Bu Teaching Hospital is the nation’s biggest and busiest safety-net hospital. It houses up to 2000 beds and is also the third largest in Africa (“Korle-Bu Teaching Hospital,” 2017). The second hospital I rotated at was Ridge Regional Hospital, which has two neurosurgeons on faculty. Ridge Regional hospital is a medium size regional hospital in the heart of the city.

In my interview with Dr. Abdallah, a neurosurgeon at Korle-Bu, he stated that one reason why there are so few neurosurgeons in the country is because of the time and cost it takes to train one. He explained that for someone to be trained as a neurosurgeon the person needs six to seven years of medical school post high school. After medical school, the physician works for two years as a house staff in the hospital. House staff is equivalent to an Intern in the United States. After two years as a house staff, the physician works for one to two years as a medical officer, also called MO-ship. At the end of the MO-ship, the physician then takes a final exam called Part 1. Passing this exam qualifies them to be a specialist.
A specialist is someone training in what Ghana considers the four main branches of medicine: Surgery, General Medicine, Obstetrics and Gynecology, and Pediatrics. This training takes about three years. After specialist training one can pursue a specific fellowship training. Neurosurgery will be fellowship training after the completion of a general surgery specialist training. Neurosurgery residency training in Ghana is four years long. This includes one year for research and dissertation.

Dr. Abdallah explained that Ghana’s health care mediums are generally grouped according to the expertise available. These can be classified into a level of primary, secondary, tertiary and quaternary health care centers. Currently, Ghana is still building their only quaternary center, University of Ghana Hospital ("Construction and Equipping," 2017). This is made possible due to a collaboration between the government of Ghana and the government of Israel. For now, Ghana only has the first three levels of healthcare mediums functioning.

The primary healthcare centers are grouped into the Chief’s Compound, the Healthcare Centers, and the District Hospitals. The Chief’s Compound is usually one building run by a nurse. A nurse and a physician assistant usually run the Health Centers. Whereas, the District Hospitals are run by two medical officers with support from physician assistants and nurses. Neurosurgery is not available at the primary healthcare center level. The secondary care centers are mostly made up by the Regional Hospitals and Polyclinics like Ridge Regional Hospital. At the Regional Hospitals, there is some level of specialized care. These hospitals are mostly run by either a fellow and lots of medical officers or by some specialists and medical officers. The teaching hospitals serve as the tertiary center. There are currently four teaching hospitals. Korle-Bu Teaching Hospital is known to be the main teaching hospital in the country, because it serves as the main referral center for the other teaching hospitals.

My first day of rotation at Korle-Bu just happened to be a clinic day. While in the clinic I witnessed a couple of things that I hadn’t thought about for a very long time. On several patient encounters, lots of my patients had to decide whether or not to do surgery. This wasn’t because their ailment wasn’t serious enough to
warrant surgery, in fact, surgery was probably going to be curative. However, due to lack of funds only an ineffective drug was prescribed instead. In some cases, they couldn’t even afford the medications. A woman came in with her 14-year old daughter who had a massive frontal brain tumor that was so big it was crushing the lateral and third ventricles causing hydrocephalus. The doctor told the mother that her daughter’s hydrocephalus was getting worse and it was important her daughter get an immediate surgery but her response was that she couldn’t afford it. So she requested that the surgeon give her daughter something for the headache and then they left. I asked the surgeon what was going to happen to the girl if nothing is done. To which he replied “her headaches would probably get worse, she will drift into a coma and die due to high intracranial pressure”. So I asked how much it was going to cost to do the surgery and the surgeon replied the equivalent of about $4,000. Sadly, this seems to be the norm in Ghana.

For a country with universal insurance, it was hard to see why people couldn’t afford lifesaving procedures. Until now, I had not seen a doctor’s office provide a print out of all the major procedures it does and the exactly cost of each procedure to the patient. One would think for a country with universal healthcare that a life threatening procedure will be completely covered, but this is not so. On several occasions, I've seen the surgeon give pain medicines because the patient couldn’t afford the surgery. Yet the patient kept coming back when things got worse and still had to defer surgery due to no funds.

When it came to the treatment of back pain, due to herniated disc, there were some similarities to that of KU spine clinic treatment approach. They also followed the protocol of having the patient try physical therapy and epidural shots prior to performing surgery, if the patient has no alarming symptoms.

At my rotation at Ridge Regional Hospital, the number of neurosurgery cases wasn’t as many as those found at Korle-Bu. This patient demographic consisted more of a middle-class population. Ridge Hospital was initially built in 1929 for the British nationals during the Pre-Colonial era. Ridge has recently undergone a $250 million dollar addition and renovation (“Major upgrade” 2017). Right next to a state of the art facility is the almost 90-year-old, building, which is still the main facility. I
asked one young attending if he was hopeful and excited about the new building and he replied, “Excited, yes, but hopeful, no”. He said since the same people who work and run the old hospital will be moving to the new hospital, most likely they will run it down just like they did with the old one.

Western healthcare is not the only healthcare medium in Ghana; one major competitor is the so-called traditional medicine. What the locals call “Abibi dro”, which means Black or African medicine. Not a day goes by without hearing the TV or the radio advertising some kind of bitters or concoction that can cure almost everything. There are road signs all around the city advertising the cure for potbelly in men and belly fat in women. I once had a spine patient who had presented with severe back pain, which was shooting down both legs. She had been suffering from this for years. She has seen several tradition medicine practitioners but none relieved the pain. When she got to us we obtained an MRI, which showed severe degenerative spine with spondylolisthesis. On physical exams, she had multiple skin cuts on her lower back. When I ask how she got those I was told that was an end result of one of the traditional medicine therapy. Post-op she endorsed little to no pain and recovered well.

There has been recently a spike in new private hospitals being built that cater for the upper class demographics. I know someone who needed a laminectomy due to lumbar disc herniation. It would have caused him about $4000 at Korle-Bu, but because it is a government-run hospital, investments in newer tools, support staff, and good reliable care was lacking. So this man paid $10,000 to have it done in a private hospital. As I end my rotation in Ghana, I am filled with mixed feelings about my trip here. On one hand, I am excited and optimistic about the future of healthcare in Ghana, particularly neurosurgery. Which encourages me even more so to come and help my motherland after I’m done with training. Whereas on the other hand, I dread the bureaucracy involved in making effective changes here. Hope the bureaucracy gets better over time and I hope I am able to help make a difference in the near future.


