

PERSONAL PERSPECTIVE

MY EXPERIENCES IN AFRICA . . .

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I have recently returned from two months in South Africa where I did some of my clinical rotations as part of my OUM medical degree. My first stop was a surgical rotation at a teaching hospital in the Cape Province. On my first morning the student coordinator took me for a walk around the hospital to orientate me and to introduce me to the doctors and sisters who would be looking after me. While walking through the maternity wing, I noticed a woman sitting on a bench in the corridor who was groaning loudly and appeared to be in the second stage of labor. All the birthing suites were occupied and there were no available beds in the maternity ward. While I was being introduced to the sister-in-charge, the groaning woman let out an agonizing scream as her membranes ruptured and she slipped onto the floor. "Paul, have you delivered a baby before?" enquired my supervisor while handing me a pair of sterile gloves. While the sister and my supervisor continued to lament about bed shortages, I brought a healthy Xhosa baby girl into the world. I had been there less than an hour!

Each day started with a quick ward round and then the rest of the morning was spent in theater. It was good to be taught the correct sterile techniques of scrubbing up, gowning and gloving and over the weeks these simple tasks became second nature. For the first week I spent most of my time watching surgery and being the "trolley-boy", wheeling the patients in and out of theater but by the second week I was being invited to assist in some of the cases. As the doctors realized how keen I was, they spent more time teaching me techniques and towards the end I was doing simple procedures like lymph node biopsies, breast lumpectomies, skin grafts, diabetic ulcer debridements etc always under strict supervision. I assisted in a wide variety of operations, including some interesting orthopedic cases, cesarean sections, appendectomies, tonsillectomies, colonectomies, and of course, there were always the trauma cases that filled any spare theater time. I was fascinated by the delicate surgery performed by the ophthalmologist

and was always amazed at how dexterous the general surgeon was with his gastroscope. The anesthetics registrar taught me how to perform a spinal anesthetic and I was given a chance to perform two 'spinals' on my own.

On Tuesday afternoons I attended surgical clinics and on Thursday afternoons I attended the orthopedics clinics, where I was given the opportunity to pop and backslab many fractures and tendon injuries.

On Monday, Wednesday and Friday afternoons I worked in



Accident & Emergency. One of the first procedures I learnt was how to insert a chest drain. In South Africa violence is a way of life and in some sectors of society the most common way to settle an argument is with a knife. One Saturday night I was at the hospital until 3am with a stream of stab and gunshot wounds one after the next. At one stage I had 5 patients sitting on a bench, all with pneumothoraces from stab wounds. In the end I could insert a chest drain in less than 10 minutes! I will always remember the comment one patient made to me that night, "Doctor, can you fix me quick because I have to go and get revenge"! One aspect that I found rather amusing was how these criminals, who would be sitting there with a bullet or knife-wound in their chest, would be so terrified when I came towards them with a dental syringe filled with local anesthetic! As all the local medical students were writing their exams, I was the only student at the hospital and the young doctors would often seek me out to teach me procedures. I had the opportunity to do a few lumbar punctures, pleural taps, breast biopsies and skin cancer excisions. One man I examined in Accident & Emergency said to me, "Doctor, there is something wrong with my gearbox" and when he saw the confused expression on my face he pulled down his trousers to reveal a syphilitic chancre on his penis!

My next rotation was in pediatrics at a teaching hospital in the province of Kwa-zulu Natal. When I arrived on the 4th January, the intern's orientation program was just starting and I was invited to join them each morning for a pediatric lecture. The topics included the major pathologies

the interns would encounter in South Africa, such as HIV, Tuberculosis, Acute Gastro-enteritis and dehydration, pneumonia and chest infections etc.

My rotation was split to include a week in the neonatal nurseries, a week with a pediatric HIV specialist, a week in the pediatric Outpatient Department and a week in the pediatric wards.

Unless you have worked in a sub-Saharan hospital you will not understand the devastation HIV is having in that region. 80% of the patients at both hospitals I worked at were HIV positive. In fact there is such a stigma attached to being HIV positive that the doctors now use the term 'RVD' instead of HIV which stands for Retroviral Disease, when discussing patients within earshot of others e.g. on ward rounds. I found it emotionally difficult to deal with the children who were mostly RVD positive and whose parents had died of AIDS. They were often being looked after by a grandmother or by an aunty. In theory, if the child is born by cesarean section, and the mother takes anti-retro-virals for her last trimester, and the child is given AZT for its first week of life, and the child is not breastfed, it has about a 2% chance of vertical transmission. However, in Africa it is not plausible to give almost every mother a c-section and formula feeding is discouraged because of the mortality caused from contaminated water, so most children born to RVD positive mothers end up being RVD positive themselves. One day I joined the Red Cross team that goes out to do a clinic at an AIDS orphanage in a rural area. Although all the children were RVD positive they were all amazingly healthy and living almost normal lives, going to school etc. They were all on ARVs and all had negligible viral loads and very high CD4 counts. In theory these children could live normal lives to old age, however, no one knows what effect the ARVs will have on them, as the side-effects include, amongst others, pancreatitis and lactic acidosis.

One of the benefits of working with so many HIV positive patients is that I have learnt some very good techniques for taking bloods to minimize the chance of a needle stick injury. For example, whenever one has a contaminated syringe in one hand, the other hand should go behind your back. When taking blood from children, two nurses are required to hold the child still so that they don't move suddenly or try to pull away.

Tuberculosis (TB) is rife in Africa and the prevalence is rising as more patients become immunocompromised due to HIV. I

had read all about pulmonary TB but was astounded by the effects of extra-pulmonary TB. When you take a history in Africa you always need to enquire about TB exposure as TB can affect any part of the body eg TB meningitis, TB abdomen, Spinal TB etc and this can make diagnosing difficult. The TB-DOTS (Tuberculosis Directly Observed Short-course) program does not work well in Africa as there are not the resources to keep the patients at the hospital nor to pay staff to observe them taking their meds. However, the drug companies have made it easier for the patients by combining the drugs into one tablet e.g. you can prescribe: RHZE (150, 75, 400, 275) which contains Rifampicin, Isoniazid, Pyrazinamide and Ethambutol. Taking one tablet per day is more attractive to the rural patients. However, there is still a major problem with drug resistance and even the second line drug, Streptomycin, is often not effective.

One day I was offered a seat on the Air Mercy Service which is a Red Cross initiative to fly specialist doctors out to district hospitals to help with difficult cases. As the 10-seater plane was just about to touch down at the first hospital, the pilots put the engine into full throttle and aborted the landing. They then circled around before landing on the grass runway. The pilot later informed me that there had been springbok grazing on the runway and they had to be chased off! My supervisor and I were the last two to be dropped off and as the plane was taking off to collect the others, the engine failed and it crashed. Luckily there were no doctors on board and the pilots walked away from the wreckage!

In Africa, I was given opportunities that I would never have had elsewhere and I would certainly recommend it to my fellow students.

