Reflective Diary

I spent my elective at Charlotte Maxeke Academic Hospital in Johannesburg, South Africa. This is a large, state-funded hospital in the heart of Johannesburg and attracts patients from across the city and surrounding areas. On my first day, I travelled to Pretoria to register with the Health Professions Council of South Africa. This was a true introduction to African administration, with a room crammed full of clients, minimal staff and an extremely bizarre queuing system.

I began my placement the following day with 4 weeks of plastic surgery. From a distance, the hospital appeared not unlike the imposing, concrete exteriors of the academic hospitals I am used to back home. However, at close quarters, the building is in a state of chaos and disrepair. I was warned to park as close as possible to hospital security, to reduce the risk of my car being stolen whilst I was inside.

I could freely roam the wards and theatres without any challenge of who I am or request to see my identification card. This is a striking contrast to the UK where I must wear my ID badge at all times or risk the wrath of the sisters and being sent home.

The plastics doctors were extremely welcoming and I was immediately invited to theatre to observe the day's list. I wasn't expected to change for theatre and could wear scrubs the whole day – a massive bonus for my laundry basket. On my break, I noticed a nurse asking a doctor for an antibiotic prescription for a friend's "flu". I was surprised that he agreed, sighing that she will keep asking until someone else does.

I spent my time on plastic surgery between daily ward rounds and theatres. There was a weekly clinic day for dressings, operation planning and follow-ups. I also attended the weekly grand rounds where the junior doctors were extensively grilled. I had to be be on my toes in case I was asked a question and I learnt a lot on these rounds!

At home, on my surgical placements, there has always been a consultant present. However, on plastics in Johannesburg, registrars are often the most senior doctors present in the list. Occasionally, a core surgical trainee equivalent performs a list on their own! Doctors and students can perform more complex surgical tasks earlier in their training than in the UK. This means that surgeons become more skilful much earlier on, and a senior registrar in South Africa may be as experienced as a UK consultant. Despite this, it is much riskier for the patients they are practising on!

Generally, theatre etiquette is much more relaxed in South Africa. Operating doctors chat freely and I joined in the conversation. Comradery amongst the surgical team seems greater, and I felt more part of the team, and less on the outskirts, than I have done back home. I was also able to get much closer to the operation and assisted on numerous occasions. Often, I would scrub up to 4 times in a day! I was also given the job of official operation photographer on an iPhone – a position I'm not sure would be available in the UK!

I saw a huge range of major operations, such as flap reconstruction, necrotising fasciitis debridement and an amazing lymph node transfer. Liposuction was also a frequent occurrence, however not for cosmetic purposes. Fat deposition is a side effect of antiretroviral drugs, and this is a common cause of gynaecomastia and buffalo humps in South Africa.

Hand surgery was also part of plastics and I saw many manual occupation-related hand injuries; such as electrical burns, nail bed injuries and fractures. Tendon repair is also frequent due to the high rate of stabbings, gun shots and bites. In hand theatre, I learnt to give wrist blocks and I administered these for several operations.

In minor ops, I assisted in skin lesion excision and wound closure. I practiced many types of stitch, including interrupted, mattress and subcuticular. This was an amazing opportunity and I am now much more confident with this skill. I also attended casualty, and it was eye-opening to see the number of patients who are victims of violent crime – particularly shootings.

On the wards I practised other skills, including venepuncture and cannulation, although the high prevalence of HIV made me much more cautious of needlestick injuries! I also learnt to consent patients for theatre. South Africa has eleven official languages and being forced to effectively convey information to patients improved my communication skills considerably.

Having thoroughly enjoyed my time in plastic surgery, I moved on to 3 weeks in cardiothoracic surgery. By this time, I had finally adapted to the 7am starts for the surgical ward rounds! There were 3 elective students on cardiothoracics, and it was great to spend our breaks together and share experiences.

The head of department loved to ask us questions on the ward rounds. I was grilled about endocarditis criteria in front of the whole surgical team. Although this was very unpleasant at the time, I made sure to go home and do some reading that evening! I was also informed that my supervisor expected a written case study from me at the end of my placement. This seemed like a hassle, but I gained valuable experience taking a history from a patient with limited English. I also took the opportunity to read up on her condition – aortic stenosis.

Cardiothoracics at Charlotte Maxeke covered both adult and paediatric patients. The unit consisted of an intensive care unit, adult and paediatric cardiac wards and a thoracic ward. I gained my first experience of paediatric venepuncture. It was my job to restrain the child whilst the doctor inserted the needle. This was harrowing, however I think it will improve my future handling of paediatric patients.

I noticed large differences in heart disease patterns in South Africa compared to in the UK. In adults, a major indication for valve replacement is rheumatic heart disease, caused by rheumatic fever earlier in life. This is rare in the UK and the rest of the developed world. However, in the developing world, over-crowding, poor sanitation and limited medical care make rheumatic fever relatively commonplace.

The number of children I saw with advanced heart failure was shocking. Antenatal screening for congenital heart defects is only commonplace amongst those who can afford private healthcare. This means that many more children are born with palliative heart conditions and unknown structural defects. Instead of repair shortly after birth, children present later in life with heart failure and/or Eisenmenger's syndrome. The case is similar for Down's syndrome screening. A large proportion of children on the paediatric ward had Down's syndrome, which increases the likelihood of defects such as an atrioventricular septal defect.

On the thoracic ward, most patients were either sufferers of advanced TB or victims of chest trauma. Alongside HIV, TB is extremely prevalent in South Africa. Poor access to treatment means late presentation is common, and lung resection or empyema drainage may be necessary. Poor compliance with the available treatment results in the emergence of multi-drug resistant strains which may require primary surgical treatment.

Due to the severity of the operations, cardiothoracics was considerably less hands-on for me than plastics. I rarely assisted, however occasional scrubbing allowed me to see the operation at closer proximity. In contrast to plastic surgery, consultants always took the lead in surgery.

One of the most common operations I witnessed was valve replacement. This was usually due to rheumatic heart disease. This operation particularly highlighted the impact of equipment shortage. Although the surgeons and technicians were highly qualified, the ideal sized valve for a patient had often run out. This meant staff were forced to deliver a lower than ideal standard of care by fitting the next closest size. I also noticed this issue with different suture sizes and materials, dressings and other operating necessities. Equipment shortage is one of the primary challenges affecting doctors working in the developing world.

Before my elective I set myself the following goals:

- Gain exposure to a wide variety of operations
- Appreciate the difficulties of performing surgery in resource limited situations
- Practice history taking and examining patients
- Communicate effectively with patients and relatives
- Practice clinical skills

I am very happy that I have achieved these goals and more. My elective was an invaluable experience which I believe will help me to become a more informed and well-rounded doctor.

Although my placement was quite intense during the week, I managed to fit in lots of activities at weekends. I managed to get tickets to a local music festival in a nearby park, it was great to see so many South African musicians and there were lots of tasty food stalls. I also attended a South Africa vs France rugby match and the atmosphere in the stadium was amazing.

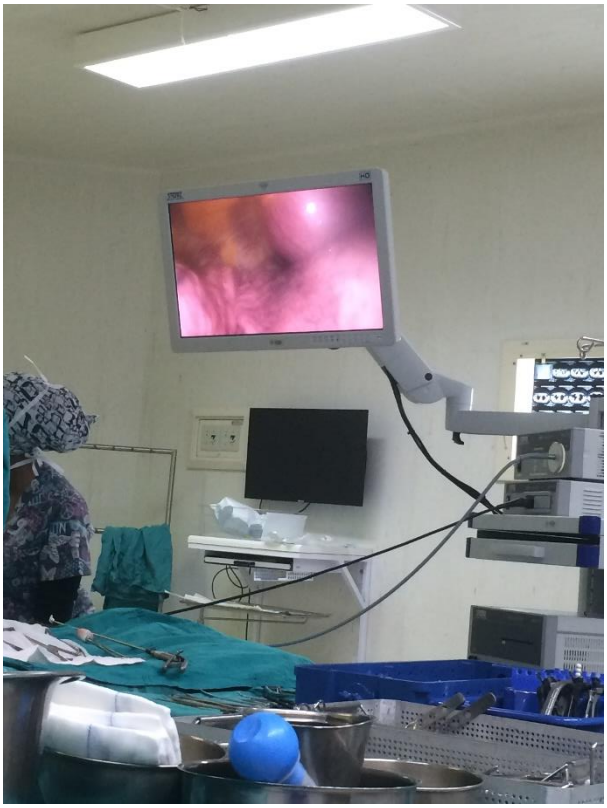
A more sobering experience was my visit to the apartheid museum. South Africa is a beautiful country however it has an extremely troubled past, which is partially accountable for the vast wealth divide today. The museum is eye-opening and I would really recommend it to anybody visiting Johannesburg.

I also made a few trips outside Johannesburg. I visited the Kruger national park which is a must do for any animal lovers! It was amazing to see so many wild animals up close which I would usually only see in a zoo. The safari guides are very knowledgeable and give you lots of interesting facts about the park and surrounding area.

Fortunately, there was a public holiday during my time in Johannesburg which resulted in a long weekend. I used this time to fly to Zambia and see Victoria falls. This was an incredible experience and it was also nice to get some hot weather as it was winter in South Africa!

After my elective, I had a week to spare before I flew home. I spent the week in Mozambique which is about an 8-hour drive from Johannesburg. The drive was really interesting as I got to see many of the more rural parts of the country. Mozambique is a truly unspoilt country and a proper African experience. Immediately after the border crossing there are no tarmac roads, only sand tracks. It was a good job we took a 4 by 4! The locals are very friendly, most of the shops and restaurants are based in people's homes. I spent most of my days on the beach where I had the opportunity to scuba dive, I saw loads of amazing colourful fish. This was the perfect way to finish my trip and made me keen to visit more of Africa in the future.

Blood room



Thoracoscopic surgery

Paediatric cardiac ward

Parklife festival

Victoria Falls

South Africa vs France

Apartheid museum