

ELECTIVE (SSC5a/b) REPORT (1200 words)

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

Emergency Medicine Elective in Johannesburg (South Africa)

After a few hours into the start of my elective in emergency medicine at Chris Hani Baragwanath Academic Hospital, Johannesburg, South Africa, I was surprised to learn that the emergency department handled only the medical emergencies and all trauma cases were separately handled by the trauma surgeons next door. At first this was quite disappointing as I was hoping for an opportunity to practice invasive practical skills and gain hands-on trauma experience that hospitals in high crime areas such as Johannesburg are renowned for. However, I soon found myself having to employ more cerebral power working with all types of medical emergencies in the emergency department which proved to be a great learning experience geared towards the foundation years training. Despite this, I was still able to help out in the surgical pit on the neighbouring trauma unit so I felt I got the best of both worlds by virtue of working at Baragwanath. Later into my elective I discovered that not all hospitals in South Africa separated medical and trauma emergencies; the practice was done in larger tertiary centres and academic hospitals such as Baragwanath.

Chris Hani Baragwanath Hospital (CHBH) serves the people of the oldest and one of the largest Townships in South Africa, Soweto, with a staggering population of 6 million, the great majority of whom have a pretty low socio-economic status. Soweto is steeped in South African history and was the former home of the late Nelson Mandela during the Apartheid. The townships were once areas used to segregate the black population of South Africa from the white population. As such, Baragwanath hospital was originally set up to cater for the black population of Soweto. Nowadays, it will see all who appear at the doorstep whilst still striving to help the 6 million of Soweto. Despite it being the third largest hospital globally, it is still understaffed and underfunded – something which became very apparent from the first week of my elective.

Objective 1: What are the common acute emergency conditions presented to the emergency medicine department in South Africa compared to those in the United Kingdom?

Of the patients that come to seek medical aid at CHBH, up to 60% are Retroviral Disease positive (RVD). This is the term used to refer to the HIV status of patients walking into the Emergency Department (ED). The term RVD, as I discovered, is used in lieu of HIV in order to avoid the negative stigmatism that is unfortunately and often associated with the virus and its disease. With such a high prevalence of RVD comes the many complications of the infection. This immunosuppressing disease, coupled with one of the highest TB incidence rates in the world, leads to numerous cases of TB-meningitis emergencies coming through to the ED department.

In addition to the above, organophosphate poisoning is quite rife also. Organophosphates are used widespread as insecticides in South Africa. However, they are highly toxic when consumed and I witnessed a good many cases of accidental ingestion or suicide attempts by organophosphate poisoning. These patients were brought in straight into the resuscitation bay. The resus bay at the emergency department housed 3 beds where we could administer advanced life support to the critically ill patients.

The most striking difference between the presentation of patients at Baragwanath in comparisons to back in the UK is not necessarily the conditions per se but rather how late the patients presented themselves. Because of this, the conditions were quite advanced by the time the patients managed to get themselves to the hospital. Interestingly, I was in Johannesburg around April/May, which meant that they were entering their Winter season. The temperature at night was much cooler and the period saw more burns victim. They were victims of paraffin, the fuel used to heat up their houses with fire. Accidents with the highly flammable paraffin were very common but these patients went straight over to the trauma and burns unit.

Objective 2: How is the organisation and delivery of emergency medical care managed in South Africa and how does it differ from the UK?

Whilst we use the Manchester system for triaging patients back in Britain, CHBH has it's own system in place to prioritise those patients coming through the front doors. Some of the nurses sit at the triage station, which is situated on the corridor just outside the emergency department. Those deemed for surgery and trauma are sent over to the surgical pit and the remaining medical patients are divided into four colours. Red are the most critically ill and wheeled straight into resus. Orange are very unwell and must be seen within two hours. Yellow are lower priority and should be seen in less than four hours. Blue of course, are the colour code for patients who are unfortunately dead on arrival. Elsewhere in the world, this code is usually black but for the purposes of being politically correct, South Africa has changed their code to blue to prevent offending the black African patients.

However, with the large gap between patient to doctor ratio, the unfortunate reality was that these patients were waiting much longer to be seen, even those in code orange and above. Not only were staff in shortage in relation to the large influx of patients but space was also a major issue. Privacy and confidentiality were luxuries as during the busiest time of the day, the bays would have to be shared by two or more patients. This meant taking a confidential history and examination were impossible but more worryingly, there was not enough space to separate TB patients. This posed a health risk to health care workers as well as other patients.

Objective 3: "What is the management plan set in place for ballistic and knife trauma at Johannesburg's Baragwanath hospital? Are there any hospital or national protocols set in place at this hospital to deal with such patients?"

When I wrote this objective before arriving at Johannesburg, I was unaware of how the emergency department at CHBH dealt exclusively with medical emergencies and not trauma so I am not able to address this objective fully. However, I was fortunate enough to have been able to help out at the surgical pit in trauma and saw a few ballistic injuries on arrival (but no theatre time). The gist of the management plan in trauma, regardless of the manner of the injury be it ballistic or sharps in nature, is to stop the bleeding, stop the bleeding and stop the bleeding. One of the patients sustained five gunshot wounds. Luckily, they were all in his extremities and missed the major vasculature. Four of the bullets went straight through and both entry and exit wounds were washed out and debrided before being sutured, packed and dressed over.

The final fifth bullet was lodged into the shin quite superficially, and I was able to assist in its removal.

Objective 4: Gain more confidence and experience within a stressful and fast-paced environment where I would be heavily relied upon in a professional capacity. Develop my practical skills by

immersing myself with the team of the emergency department and getting hands on experience. Build on my management planning skills for acutely unwell patients.

I strongly feel that I am returning to the UK to begin my Foundation Year training feeling more confident at managing an acutely unwell patient than when I first set out for Johannesburg from Heathrow airport.

I felt very welcomed and was treated as an FY1 junior doctor rather than a medical student. I felt part of the team, especially during ALS in resus where I witnessed the first death of my patient whom I was looking after. My practical skills have improved exponentially; I gained more confidence doing bloods, ABGs, I.V. drips, cannulas and catheters in the 6 weeks than in the last 5 years of medical school.

Having never really emphasised on differential diagnosis and management plans of patients when clerking them on wards back in the UK as a medical student, I more than made up for it in the emergency department at CHBH. Where I used to shay away from, by the end of my elective, I was not afraid to come up with a plan (right or wrong) for my patients, a professional development for which I am most pleased in preparation for commencing my work as a junior doctor come August.