# ELECTIVE (SSC5c) REPORT (1200 words)

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

**Year 5 Elective Report**

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**How does the type and caseload of traumatic injuries in South Africa differ from that seen in the UK?**

**I spent my year 5 elective placement in the trauma unit at Chris Hani Baragwanath Academic Hospital in Johannesburg, South Africa; one of the world's largest hospitals and a world renowned teaching hospital, especially with regards to trauma care. South Africa, and the Johannesburg metropolitan area in particular, have a much higher incidence of trauma than the United Kingdom, which results in a much higher case loads for trauma surgeons. Most cases I saw were either the result of vehicle accidents, which are common particularly on the weekends when drunk driving is widespread, or violent assaults. The latter commonly presented with gunshot and/or stab wounds, or occasionally blunt trauma.**

**A number of patients present after so called mob assaults, which are usually carried out by a group of people or even a whole community in retaliation against a perceived or actual crime. It is a relatively common practise particularly in the poorer townships, and results from a lack of trust in the police force or the judiciary system, which results in citizens taking the law into their own hands. Mob assaults are carried out as a punishment for crimes such as rape or assault, but also less severe crimes such as theft. One patient I saw had been caught stealing scrap metal and subsequently been assaulted using a traditional weapon called a Sjambok. These are long sticks or canes originally fashioned from animal hides, which are used to beat the victim and leave characteristic bruises, so called tram tracks on the skin. Victims of mob assaults, especially with extensive Sjambok injuries, are at particular risk of crush injuries and subsequent rhabdomyolysis, which is why they require close monitoring of renal function and fluid replacement.**

**Burns account for a significant share of cases seen in the trauma department. These are more common in the winter months and particularly common due to paraffin stoves used for heating and the common practise of cooking over open fires.**

**How is trauma care delivered in South Africa and how does it differ from the UK?**

**Probably due to the sheer volume of trauma cases, Baragwanath Hospital has got a dedicated trauma unit, with trauma surgery being a specialty in its own right. Other than in the UK, where most trauma surgeons are orthopaedic or vascular surgeons, trauma doctors in South Africa exclusively deal with traumatic injuries, in a much more autonomous way. Whereas a trauma call in the UK usually summons a team of emergency physicians, trauma surgeons, anaesthetists and other specialties, the trauma department at Baragwanath does operate without any other specialties during their resuscitations. This leads to trauma surgeons not only operating, but also managing airways, inserting central lines and every other task required to carry out during resuscitation of trauma patients.**

**The trauma emergency unit is therefore a separate surgical emergency department, located next to the medical ED, with separate entrances. Patients coming into the department are triaged and assigned a number ranging from P1 for patients with life threatening injuries who go to the resuscitation room straight away, to P3 for walking patients. All patients who are not in resus are assembled in an open area called the surgical pit, in which the departments of trauma, general surgery, and orthopaedic surgery clerk, examine and treat their non-P1 patients. Patients with traumatic injuries first go to the trauma desk, where focused histories are taken and examinations performed. If any bony fracture is suspected and subsequently confirmed on imaging, these patients are discharged from trauma an sent to the orthopaedics desk for further treatment, or otherwise treated by the trauma team.**

**Even though the trauma doctors carry out all their resuscitations on their own, they are incredibly skilled and confident in dealing with life threatening injuries. The process itself follows the internationally standardised ATLS approach and therefore varies little from that seen in the UK. However, the caseload, especially on weekends, can be much higher and it was a common sight to see the eight-bed resuscitation bay to be filled with almost twice as many patients. This requires an incredible amount of skill and multitasking ability, as team members are continuously pulled from an on-going resuscitation to deal with a newly arrived patient.**

**Aside from the consultant on-call, who is usually in theatre operating or overseeing work in the resuscitation area, at least two registrars are on call at all times. They make the majority of immediate decisions and review patients clerked in by more junior members of the team. Their responsibilities are often more extensive than in the UK, where many of the more critical resuscitations would be lead by a consultant. The majority of the initial clerking as well as much of the resuscitation work is carried out by so called interns, who are comparable to foundation doctors in the UK. However, similar to the registrars, their practical skills and responsibilities are often higher than what I have been experiencing at home. One reason for this might be the much higher workload and longer working hours, especially in the Baragwanath Trauma Department. Most interns would be on-call twice a week, during which they would staff the casualty area from 7am in the morning until 7am the next day, followed by handover, ward rounds and general ward work until the early afternoon. This**

**was complemented by a full 8-hour working day on days not spent on call, resulting of a workload often in excess of 80 hours a week.**

**As elective students, we would generally work similar hours to junior doctors, with 2 on-calls per week, one of them on a weekend, which would give us a single day off each week. Weekends were particularly busy and there was often very little time for rest of food, which made these days particularly tough. Working these long hours was very tiring and also felt unsafe, as the rate of clinical errors and accidents such as needle stick injuries went up sharply towards the end of the night. Three fellow elective students had to start PEP after needle stick injuries from a HIV positive patient during my time at the hospital. In addition, formal teaching was absolutely minimal and senior supervision often scarce. This made the elective very challenging, and I advise any future students to take their personal safety very seriously and take great care.**

**On the whole, I would strongly recommend this elective, but only to those who are willing to endure long hours, lack of sleep, equipment, and senior supervision, in exchange for very in-depth clinical experience and the opportunity to learn invasive skills such as chest drains or central lines.**