## ELECTIVE (SSC5b) REPORT (1200 words)

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

**1**
**To understand the pattern and burden of Traumatic injuries and presentations to the Emergency Department in a trauma centre in South Africa and to see how the management of these cases compares to the UK and other more economically developed countries**

Khayelitsha hospital is a small hospital with two wards (medical and surgical), an obstetrics department and emergency centre (A&E) which serves the township of estimated 2.4 million population. The township has little gang crime but is struck with poverty where the richest part of the population earns only £1,300 per year. The poorer parts are largely unemployed. The majority of trauma cases which presented to the department were due to penetrating trauma, usually resulting from drunken brawls. I learnt it was the social norm for people to drink excessively on weekends which ultimately leads to significantly higher numbers of trauma cases on Fridays and Saturdays. The second largest cause of trauma was motor vehicle accidents, where patients were usually struck by speeding cars in the township resulting in blunt trauma injuries. Few cases were due to gunshot injuries.

Due to the high incidence of trauma, it was not possible for the hospital to treat all patients in resus. I quickly learnt it was common for patients with several knife injuries to be left in triage for several hours, often over 12 hours, to be assessed formally by a doctor. The triage system was drastically different to the UK. One or two junior nurses were responsible for triaging patients into minors/majors based on presenting complaint and observations. Although a system was in place to categorise presenting complaints (for example all chest wounds go to majors) Unfortunately, this meant many sick patients were missed as the inexperienced nurses were unable to identify the more dangerous injuries or pick up subtle hints of a deteriorating patient which are not reflected in their NEWS score.

Management of serious trauma occurred in one of the four resus bays. It was immediately apparent to any western visitor that the resus department was largely under equipped. This was often noticed with the simple things - for example there were only a few dozen short lines in the department reserved for the sickest of patients, which made connecting IV lines and giving drips problematic. Cannulas were also taped down with cheap masking tape which meant they regularly fell out. This was clearly a false economy as replacement lines cost more than a cannula dressing would have cost.

The primary assessment of trauma was very similar to England, however the boundaries of A to E were not clear cut and many things (reasonably so) happened simultaneously. The largest problem with management of trauma patients was the lack of CT scanner. This placed a lot of pressure on staff to identify problems with mobile X-RAY, FAST scans and clinical acumen. The closest tertiary centre (Tygerberg) is a 30 minute drive away and patients would often be waiting a very long time to be scanned there if transferred. This meant patients must be stable before transfer.

**To understand how a Trauma department in South Africa functions in comparison to the UK in terms of streamlining, organisation and facilities, and to understand differences in pre-hospital emergency care provision between the UK and South Africa.**

The greatest difference in ED organisation in South Africa is the quality of nursing care. Although nurses are all trained and qualified, their cultural attitudes, nurse/doctor

relationship and work ethic falls significantly behind the western world. I realise now how lucky the UK is to have a strong nurse doctor relationship in balanced teams which work on patient centred care. Unfortunately, some of the practices I witnessed in South Africa by nurses both shocked and appalled me. Nurses do not engage in a team environment, and many typical nurse jobs are left to doctors. In resus situations, I regularly saw nurses watching videos on their phone instead of assisting with attaching equipment, making observations and drawing drugs. It would often take several calls be senior doctors to get important medicines drawn up or for other help. This was a cultural issue of public sector nurses who are not regulated and according to my peers was reflected across many other hospitals. In many situations, I found myself being ignored asking nurses for help, either to be a chaperone or to assist the team with procedures. In one resus situation, the consultant in charge of the ED witnessed this lack of will to assist as I asked for help which led to the head matron being summoned by senior doctors and involved. I felt this was an ongoing cultural issue which I did not want to get involved in but was glad to see senior doctors trying to change the way things work.

Interestingly, I found the few agency nurses present to be very professional and proactive with patient care.

I found the streamlining process of the department to be extremely ineffective to due the triaging process. I was often placed in the triage area and would regularly find sick patients wrongly triaged by the nurses. As the triage doctor would be very busy working through the lists, in between clerking I would regularly visually check on patients folders for worrying vitals or worrying presenting complaints. On many occasions, this identified sick patients which was appreciated by our medical team. For example, a clearly sick looking patient waiting in triage for 12 hours was triaged with “left arm pain” which was actually cent al crushing chest pain radiating down their left arm. I was relieved to hear the doctors were also worried about the triage system and were fighting for more funding to get a doctor to triage the patients with nurses (instead of just seeing them once triaged). I personally feel the system would benefit with more senior nurses being placed in triage.

**To understand differences in the structure of the South African health care system and the NHS and to appreciate how this is influenced by poverty and lack of resources**.

An immediate observation of the health care structure is the abundance of labour workers (for example cleaners and porters) and the lack of doctors. The entire emergency department was run by four to six doctors, plus regular international visitors. This placed an enormous workload on doctors and a heavy reliance on international students and doctors to engage in the team and contribute where possible. This system was a reflection of the large social pay gap in society, where labour was cheap but education

The hospital itself was supported by many community clinics which were accessible to everyone in the townships. I learnt that healthcare is not free, but based on annual income. This meant many patients declared themselves unemployed to avoid paying for health care (but would also request sick notes for work!). This system was clearly slightly flawed but it did mean poorer people had access to healthcare.

**To integrate into a team of healthcare professionals and contribute effectively in a department where resources may be lacking compared to the UK. To learn medicine from a cultural perspective. To improve my clinical skills including practical skills, clerking patients, communication skills and management of acute presentations to the Trauma unit / Emergency department for preparation as a Foundation year 1 doctor in the UK**

My greatest take home lesson from Khayelitsha is the importance of teamwork.  From day 1 I felt warmly welcomed into the strong team ethos amongst the doctors. Everyone junior to senior was treated as an equal and this difference of a flat (yet present) hierarchy was noticeably different to the British consultant culture.

The team would always take breaks together and share fresh coffee, usually brewed and handed out by the team leader. This bonding time allowed relationships between staff members to form and was greatly reflected when in the fast paced emergency room environment. It also allowed the international visitors to integrate into the team far quicker. I felt this is an area where British medical culture can improve.

My practical skills improved immensely during my elective. I found South Africa's teaching culture to be far more involved than Britain. Wherever possible, students would be given opportunities to perform practical procedures with supervision. For example, local students and elective students were regularly allowed to insert chest drains with close senior supervision. Due to the high prevalence of HIV and TB, many lumbar punctures were regularly performed and I now would feel comfortable to be able to do them in the UK with adequate supervision. I also became very comfortable suturing with various techniQues and estimated that I placed at least 1000+ sutures during my elective, as well as 100+ staples. This improved my suturing skills as well as my surgical and hand ties. Under supervision, I had the opportunity to reduce several fractures and apply plaster.

As well as these skills, I became very proficient in taking bloods and inserting cannulas in shocked / difficult patients which I feel is extremely beneficial to my UK role as an FY1.

Academically, my skills in chest X-rays improved drastically as virtually every patient received one. I now feel more comfortable identifying smaller pneumonias, cavitating lesions, masses and oedema. I also saw dozens of broken bones on X-rays which helped me understand the smaller changes in less obvious fractures.

A great lesson I learnt in management was resource management. At Khayelitsha, patients only received tests that would affect their management. This was immediately noticeable in blood tests as you were required to justify every component of the test - for example, you would not order a U&E, but rather required to tick every component you needed. It was interesting to see how often the more expensive tests such as calcium, magnesium and phosphate were completely unnecessary. I feel this will impact my work in England, make me consider my investigations more carefully and make me less wasteful with resources.