## ELECTIVE (SSC5a) REPORT (1200 words)

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

My elective in orthopaedic trauma in Groote Schuur Hospital has been both insightful and rewarding. I have gained a good understanding of the healthcare system in Cape Town and South Africa in general, exposed to a variety of traumatic injuries, as well as made many friends and memories to last forever.

South Africa has been named the most beautiful city in the world by many magazines, but it is also the one of the most dangerous cities in the world. With Groote Schuur Hospital (GSH) being a major tertiary hospital in Western Cape, I had the opportunity to witness the trauma pattern and the care pathway first-hand. There was a clear pattern to the injury pattern observed, the highest volume of patinets seen between Fridays Sunday, more so on a pay day weekends. Many injuries resulted from the influence of alcohol. The most striking thing is that the majority of trauma happens in young people with high impact injuries, a distinctive proportion from gang violence. This is in contrast to the UK where a large number of orthopaedic injuries are osteoporotic fractures in elderly population due to fall from standing height (low energy injury).

I am particularly intrigued by the trauma care pathway in this country, therefore in addition to my time with orthopaedic surgery, I shadowed and helped out in the trauma unit. This is where they provide comprehensive emergency services to patients who have traumatic injuries including automobile accidents, gunshot wounds, stab wounds etc. At the beginning of the Easter break, where I was advised that there will be a high incoming trauma because this is when people starts to drink, I spent the day following an 18-year-old patient who was shot once in the abdomen and once in the hip. I first saw this patient in the resuscitation corridor as he was brought in by the ambulance. We quickly did a primary survey and assessed his injury, and he was lying on the operating table within 2 hours. For patients with severe injuries the timeline from arrival to action is impressively fast, the efficiency in theatres even during elective operations are commendable. I assisted in the operation which was a laparotomy to identify the injury and then proceed. We found that his spleen was shot through, as well as the greater curvature of the stomach and a part of the liver. He had a splenectomy, and a part of the stomach was taken out, and opposing edges were sutured back. Luckily he had no injuries to the bowels and after careful run through of the bullet trajectory, the surgeons were satisfied and we closed him up.

Typically the demographics of trauma in Cape Town is majority young male. However, the degree and frequency of life-threatening traumatic injuries, which requires higher level of intervention, is much more common compared to that of the London. The most common instrument for murder are firearms, followed by knives, unidentified shapr instruments, body parts, and bottles. Some research revealed that the most dangerous township in the whole of South Africa is only 5km away from the Cape Town international airport, a mere 20km from the scenic beaches - a prominent tourist attraction. The crime in Cape Town has been reported to double in the last decade in 2017, with over 20 murders a day, almost doubling the national average in South Africa and ten times the global average. This is an extremely abnormal and worrying situation in a capital city of country which is not at war. Violence is not exclusively within gangs or armed robbery, violence within intimate relationships, and violence against children are also extremely damaging but can be less visible on the plain sight. This requires the clinicians to have eagle eyes and a low suspicion threshold, as well as more community awareness.

The city is hugely divided both socially and spatially. The inequality between the poor and the wealthy cannot be mistaken. The legacy of the apartide led to flourishing of gangs in certain communities and townships, and these continues to the epicentres of violence. Today the area still suffers from deep-rooted, socio-economic problems. Poverty and unemployment are the norm here, which are recipes for crime. The homicide rates are highly unequal in terms of distribution in the area, where 80% of the homicide happens in townships known as the Cape Flats, located in the south-east of the city. South Africa tops the inequality rank (Geni index) in the world with a score of 62. The vicious cycle of poverty and violence can be hard to break, and it may take the country decades to overcome it.

There is also a high number of community assaults happening on the streets. The patients usually aren't great historians and are reluctant in telling you more details about the injury. Most commonly they are sent to their local district hospitals, which in many cases lack the essential imaging facility to examine the injuries. So quite frequently

the referrals from these neighbourhood hospitals will be transfers of patients to GSH for a CT scan, then send back to their local hospital immediately. This inevitably causes delay of treatment and sometimes may mean the elapse of best treatment timeframe for the patients. This lack of levelling essential facility in wide community is a contributing factor in healthcare inequality. This is in contrast to the private healthcare service, which runs in parallel to the public healthcare system but with vastly imbalanced resources and over 80% of fully trained doctors work full-time privately. The private hospitals have more experienced doctors and better diagnostic and therapeutic facilities.

One of the things that were highlighted to me quite early on was the communication and interaction between doctors and patients. The importance of communication skills with an empathetic and holistic approach has been taught to us from the very first day at medical school, and remains at the forefront throughout our training. The approach taken in South Africa would be considered to be a more direct and straight diaglogue with little room for pleasantries and privacy. The attitude from the patinets' side was also different, commonly they did not expect to be involved in the decision making process, but their care solely dependent on their trust entirely on the doctors looking after them. This is not to say the informed consent for procedures or surgery is in any way compromised, this is very well practiced and in fact, I observed two cases where the medical superintendent was contacted effecintly to allow for consent in unconscious paitents, and the process was streamlined and well conducted.

I have enjoyed my time with the orthopaedic deparment greatly, not only did I learn and assist in theatres, I practiced and gained experiences in fracture management and surgical and non-surgical management of orthopaeidc injuries. The deparment has a dynamic learning vibe and also a reputation for publishing widely and critically on the issues of trauma management and injury prevention. This has been an important learning experience and I hope to take back the positives and apply them to my future clinical practice.