ELECTIVE (SSC5b) REPORT (1200 words)

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

Describe the pattern of disease and their management in patients who use the Trauma and Orthopaedic services in Nepal, and discuss how this differs to the UK.

Even before I stepped into Manipal Teaching Hospital (MTH) I got a sense of what I might expect to see once I started my placement. The health and safety laws of the UK I was used to was a world away from what was the norm in Pokhara, Nepal. The nature of the driving was one of the things that struck me the most. Entire families, with the dog I might add, were often transported on a moped/ motorbike, and with the driver being the only one who was required to wear a helmet the other three passengers on the moped were left exposed. Also, I don't think I saw anyone wearing protective clothing at any point. On top of this, the rules of the road appeared to be non-existent, or at the very least not followed, for example not slowing and giving way when joining major roads or roundabouts, weaving from lane to lane and driving on pavements!

True to my expectation, the vast majority of patients I encountered had traumatic injuries caused by road traffic collisions with a minority of injuries on the ward being as a result of manual labour accidents. In the same way, I encountered lots of major trauma at the Royal London Hospital (RLH) there was much of it here too, but in Pokhara, there was a greater incidence of head injuries which more often than not were fatal. The poly-trauma injuries that made it onto the wards followed much the same pattern as I have witnessed in the UK, long bone fractures and fractured ribs, however, the management of them was much less 'heroic' than at the RLH, which often uses external fixation to stabilise joints before more definitive procedures using plates and nails. At MTH, much of the orthopaedic management was done through the use of traction like the Thomas Splint and Gallows traction, something I have not much of at the RLH. Management of fractures using traction is seen as a dying practice in the UK, does provide adequate reduction of fractures and good pain management, but as it requires lengthy immobilisation this is something that is not often done in the UK. Long periods of immobility increase the risk of complications like DVT and mortality especially in older patients carries out management that intends to speed up recovery and mobilisation. Due to the nature of the health care system in Nepal with its limitation of resources and lack of funding, operations are expensive and the risk of complications post-operatively is much greater here than back in the UK, so traction is often deemed the best option.

Something else that I noticed whilst on the orthopaedic ward was that there were no elective patients, so there was no-one who was admitted for a replacement of a hip or knee joint. Having attended orthopaedic clinics I found that all the management of patients with osteoarthritis involved counselling and conservative measures like recommending simple analgesia. Joint replacements were seen as an extreme measure and something that was only taken up by wealthier patients, who would probably not be attending MTH but seek the services of a private hospital.

Describe the pattern of healthcare provision in Nepal and compare this with the UK.

The WHO puts Nepal as 1 of the 49 countries that have a significant shortage of healthcare provisions. The population of Nepal is 27.8 million and has a density of physicians to 1,000 people of 0.60. When comparing this to the 60 million population of the UK where the physician to 1,000 people is 2.83, one

can see that Nepal falls massively behind and is well below the WHO-defined critical threshold of 2.3. The poverty in Nepal and the peppering of healthcare services results in a health service which is unable to provide quality care for its population. Within Nepal, there are 743 hospitals (most of which are private), and smaller health care centres and health posts which can be found in rural areas. Many of the centre found in rural areas are run by health care workers who are not trained in the management of trauma and other emergencies. In light of this, many patients find themselves hours or sometimes days away from getting proper medical attention. Even then, because resources are spread so thinly, in larger cities like Kathmandu and Pokhara patients find themselves being transferred from one hospital to another in order to get the appropriate care.

One thing that struck me the most was the very basic nature of the ambulance services. The ambulance was basic jeep which none of the fancy equipment that one expects to see in a London Ambulance, it consisted of a basic stretcher, oxygen, and essentially what would be considered a standard first aid kit. The ambulance service in Pokhara is essentially just a means of transport since the staff on board are not usually medically trained. What I actually found was that much of the hospital transport was done by taxi drivers who find themselves having a passenger who needs taking to the hospital.

Describe how socio-economic factors affect the health of people in Nepal.

A quarter of the 27.8 million Nepalese population is thought to be living in poverty and it is known that this is one of the largest barriers to having good healthcare services. The life expectancy of Nepal is 68 years, compared to the life expectancy across in the UK which is 79.5 for males and 83.1 for females. With that being said, health inequality is as much talked about in the UK as it is in Nepal. In the UK there are large disparities between the rich and the poor when it comes to life expectancy and health problems encounter during their lifetimes. Life expectancy is 9.2 years less in men living in the poorest areas when compared to those living in richer areas and women in poorer areas have a 7.1 years shorter life expectancy than their richer counterparts. With urbanisation being a recent occurrence in Nepal (18% of the population live in urban areas), it needs to take care to construct a healthcare system that creates a system of equity to ensure that it avoids the disparities that are present in the UK, but the challenge it faces is massive.

In Nepal, there are already extremes within the population, and with its health service in its infancy, it is struggling to accommodate the demands. Looking at the population as a whole, 44.8% of the population live under the poverty line and 96% of people in lower socio-economic groups live in rural areas, most of the rich live in the urban areas. With that being said, almost 60% of the urban population live in slums because although there is a drive to move to the city, infrastructure and earnings are not conducive to good standards of living. The combination of poor earning and poor living standards leads to an inequality when it comes to the health of its population and access to resources. The rich living in the urban areas expect good health provisions and so there is a demand to have facilities there, this creates a skew in services and means that poorer people living in rural areas must travel great distances to access them. Consequently, those in rural areas are less likely to get the prompt and timely care that they require. This is something that was evident when I was seeing patients on the wards. Some patients often presented late because they had pressures to work for their families in spite of their injury. Others presented late because they simply didn't have the finances or the means to get to the hospital so only go to the hospital when things are serious. This means their outcomes are often sub-optimal when compared to the richer population and very a much higher disability and mortality rate after injury.

Further my understanding and knowledge of Trauma and Orthopaedic medicine to gain more insight into this speciality as a potential future career.

The time that I spent at MTH is something that I will remember very fondly. I was considered as part of the team very quickly and I was able to shadow them in much of the same way that I have done in the back in London- going on ward rounds, sitting in on clinics and observing surgeries. Although there were some differences in the management of patients, all the things that I saw were strangely familiar, as in the patients were essentially the same as in the UK. This was most apparent when I was in the clinics because, like in the UK, most of the patients presented with a backache and general aches in the joints. As much as I like being in the OR, the routine of clinics hit me just as quickly here as it has done in the UK. I don't know exactly what I was hoping to see whilst in Nepal but perhaps I was hoping for a little more variety. This has made me think whether orthopaedics is the speciality for me since clinics make up such a large part of the job and maybe I need to look into other specialities which have fewer clinics.