## ELECTIVE (SSC5b) REPORT (1200 words)

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

## **Objective 1:**

Determine how the MDT team influences the care of patients with leprosy in Nepal compared to how the MDT fuctions in the UK.

In this hospital, there is an MDT which works to diagnose, treat and manage patients. In the MDT, there are nurses, paramedics, doctors, physiotherapists and footwear technicians. Notably, there are no healthcare assistants nor physician assistants in this team. Much of the work that would usually be done by these individuals is still part of the nurses role. Paramedics have a much broader role here than they do in the UK. The paramedics ran their own skin clinics and saw vast numbers of patients. It was only when there was a particularly difficult case, these would be referred to the doctors.

The clinicians here have to work very efficiently, because there are such great numbers of patients which are seen in this hospital especially in the clinics. The MDT team is well integrated especially in the outpatient setting. The patients come in to see either a paramedic or doctor for a diagnosis. They then go to the physiotherapists to test nerve function. A decision is then made to see them as an outpatient or to admit them. At this point if patients have wounds and ulcers, these are thoroughly cleaned and dressed by the specialised nurses. Further down the line, if patients have had amputations due to leprosy complications, the footwear department creates personalised footwear to help prevent reoccurence of ulcers etc.

Before patients are discharged, they are often put into contact with the community self care centre which focuses on training patients to cope best when they are back at home.

Overall, this integrated approach is very cohesive and prevents many unnecessary readmissions. There are some gaps in this MDT team though as they really have a need for prosthetics input too. This is something which is being developed at the moment.

## **Objective 2:**

Understand which factors contribute to leprosy being much more prevalent in Nepal compared to the UK

There are many factors which could be contributing to the high incidence of leprosy. There are also significant knowledge gaps for example about the way that leprosy is transmitted which makes it very difficult to eradicate completely. What is known is that the population in this area of Nepal and the corresponding area below in India, are very poor. The majority of people here live below the absolute poverty line. The main occupation here is agricultural work which may be contributing to the high prevalence of leprosy here as the leprosy bacteria has been found in the soil too.

Due to the poverty levels, people generally live in cramped living quarters with many people and are malnourished. Being malnourished will be detrimental to a person's ability to fight off infection and the cramped living conditions can mean that it is easier for the disease to transmit from person to person.

Education levels are very low in this region and access to affordable healthcare is difficult. This can lead to people not recognising when they should go to the doctor and sometimes choosing not to go due to the financial and time burden. As people are sitting at home with leprosy, this increases the risk of it being transmitted to others, but also means that leprosy is often quite advanced with complications when the patients do present.

There are also theories that the population here has a genetic predisposition to acquiring leprosy.

The cause for increased prevalence of leprosy in Nepal is very much multifactorial, however it does primarily centre on the high incidence of absolute poverty.

## **Objective 3:**

Understand the role of the socio-cultural context surrounding leprosy. Determine how this impacts patients with leprosy and what consequences this could have.

The socio-cultural context surrounding leprosy is complex and has been slowly changing in recent years. There is a lot of stigma surrounding leprosy as it's complications create joint deformities and can result in amputations.

Leprosy is often a disease which is associated with lower economic status and lower educational levels. This means that in the communities where leprosy exists, many people do not understand leprosy and are scared of being in contact with people with leprosy. This has created a huge barrier for patients with leprosy and causes them to hide their disease when possible. This results in late diagnosis and severe complications which could have been easily avoided.

Where stigma exists, patients find that they can be outcasts in their village and exceptionally some are never allowed to return. Others find that they are unable to marry and not allowed to work certain jobs. This makes it very difficult to cope with this disease.

In essence, leprosy is very treatable with multidrug therapy. The difficulty is that leprosy is not seen as a treatable disease in the community. Leprosy causes anaesthesia especially of the extremities. Due to the anaesthesia, a patient may get a wound which they do not notice. This then develops into an ulcer which can become infected. If the infection spreads, it can cause osteomyelitis and sometimes amputations have to occur. In this scenario, which is very common in patients with leprosy, the leprosy itself may have been treated years ago, but it's complications are an ongoing problem. The fact that the anaesthesia is irreversible means that patients can develop ulcers and receive amputations years after the original infection has been treated. At this point, patients are no longer infectious, but they are treated as though they are. Leprosy can be a very difficult disease to live with and can cause many mental health problems too. **Objective 4:** 

Understand the role of plastic surgery and other surgery in the care and re-enablement of patients with leprosy.

Plastic surgery does have an important role in leprosy care, however many other interventions such as patient education and nursing care of ulcers can be more important at times. The role of plastic surgery in leprosy care is two fold. Primarily to explore and debride wounds and to amputate when necessary. Secondly, reconstructive surgery is very important in order to restore function to limbs with amputations to allow patients to function independently.

There was a lot of surgery mainly to perform amputations and to carry out exploration of ulcers. For many patients with ulcers, wound care is appropriate. On the other hand, there was a large group of patients who did require surgery. These were patients who either had evidence of osteomyelitis on the x-ray or those who had had infected ulcers for many months which had therefore probably affected the integrity of the bones.

Wound debridement was a very important function of plastic surgery here as some of the wounds were infested with maggots and had lots of dead tissue. I learnt a lot about wound debridement and about upper and lower limb and digit amputations. I also better understand the value of wound exploration and some of the limits of imaging techniques.

Reconstructive surgery is no doubt very important in the re-enablement of patients. Sadly I did not have the opportunity to see any reconstructive surgery as the responsible surgeon was away during my time here. Although I did not directly see the surgeries, I did meet patients who had undergone reconstructive surgery in the past.