

## **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/ illness that is seen in Nepalese critical care and discuss this in the context of global health**

During my time at Manipal Hospital, I spent the majority in the gastroenterology ward with a few days in the emergency department and paediatrics. Although the ward was officially gastroenterology and the consultants were in this specialty, the patients' conditions were not necessarily associated with gastro. There was one snake bite, one suspected malaria, one tuberculosis, two suspected poisonings and a large number of alcohol abuse and stomach cancer patients during my tally of the first week.

According to the WHO, the prevalence of liver cirrhosis is 32.3 per 100,000 of the population and alcohol misuse is present in 3.7% of the male population and 0.7% of the female population<sup>1</sup>. According to the ward consultants on my placement, this figure is estimated to be falsely low due to accessibility to medicine by the rural population and the cost of medical services. In addition, the quality of services varies greatly which impacts on diagnosis levels and data provision to the national database. Within the top ten causes of death in Nepal, alcohol based conditions and gastric causes are not present except as a sub-category within self-harm and road injury<sup>2</sup>. There is currently no restriction for alcohol consumption and driving while under the influence of alcohol.

There is a high burden of disease within the population through nutritional, maternal and neonatal conditions. Preterm birth complications is the tenth most common cause of death in Nepal at 2.5% of all deaths<sup>1</sup>. The underlying causes of this are complex but the availability of medical services and clean water are contributing factors. 31% of the population live below the poverty line, defined as less than \$1 per day and only 35% of the population have access to good sanitation<sup>3</sup>. In 2006, 49% of children were found to have some level of growth stunting due to malnutrition.

The average life expectancy in Nepal is 62 which is 8.5 years less than the global average of 70.5 years<sup>4</sup>. This reflects the poverty, lack of sanitation and varying levels of access to medical care.

**Describe the pattern of critical care provision in Nepal in contrast with the UK**

Over the past two to three years, five ambulances have been introduced to Kathmandu and another ambulance has been introduced to Pokhara. These ambulances are equivalent to the standard ambulance in the UK. Outside of this, there are very basic 'ambulances' that contain a stretcher, oxygen and occasionally fluids if available. Patients have to pay for these on top of their treatment in the hospital but they don't provide effective pre-hospital care in the community especially for trauma or acute medical conditions.

If these are not available, then a taxi can be used to transport a patient to hospital. However, taxi fares are expensive for Nepali population as so many live below the poverty line. Transport access outside of cities is severely limited due to the steep terrain and so access to critical care is also restricted geographically. It can take between hours to days for patients from rural areas to gain access to medical care in community care clinics. These clinics have limited medical supplies and patients with more serious conditions are required to go to city hospitals. This can then take an equally long amount of time. If the patient has an acute condition such as stroke or a myocardial infarction, it is unlikely that

they will be able to access medical care in time. Further to this, if they cannot afford treatment or run out of funding they will not receive medical aid even if they get to a hospital. Unlike the UK where care is continuously being centralised, every hospital in Pokhara has an emergency department. However, the level of care varies greatly between hospitals and during my stay there were multiple transfers to the Manipal emergency department from the surrounding hospitals.

In urban areas, the hospitals provide walk-in clinics which don't require appointments, similar to in the UK. Walk-in clinics are open during normal working hours, otherwise patients must go straight to hospital. There didn't appear to be an equivalent to GPs in Nepal. Clinics provide an initial assessment and patients can then be referred from clinic to the emergency department or another appropriate specialty.

Within the emergency department, treatment varied greatly between hospitals. For even straightforward cases, patients were often transferred to Manipal hospital from other hospital EDs due to limitations in treatment options. Despite this, treatment was often very basic and stroke was not treated as vigorously as it is in the UK. This is due to availability of medicine and also the average length of time between the stroke occurring and patients arriving in hospital meant that the stroke had happened hours before arrival.

Compare and contrast paediatric care between Nepal and the UK and how this impacts on patient outcomes

During my time in Nepal, I spent some time in the paediatric unit at the hospital. The first notable difference between Nepal and the UK was the lack of a neonatal ICU. There was a very basic paediatric ICU but it was part of a normal ward and didn't appear to have any specialist equipment.

According to the WHO, only 42% of births in Nepal are recorded officially. This is in part due to the high level of home births and also the percentage of the population in isolated rural areas. Giving birth in hospital is seen as very unusual, mainly because of the costs involved and there are limited community midwives. This means that most newborns have little to no access to clinical care. This is reflected in the under five causes of mortality of which 19% is prematurity, 14% birth asphyxia and 10% neonatal sepsis<sup>2</sup>. Preterm birth complications for women is also featured in the top ten causes of death in Nepal reflecting the lack of clinical care for childbirth.

However, immunisations for diphtheria, tetanus and pertussis is continuing to increase with 85% of 1 year olds receiving the immunisations. The slight caveat to this statistic is that due to the low number of recorded births, it is unclear what percentage of children are truly immunised. Unlike the UK, there is no program for immunisations and health checks for children.

Develop verbal and non-verbal communication skills with non-English speaking patients

During my time in Manipal Hospital, I found that most nurses and doctors had a good grasp of English. The only difficulty I had with staff was accents and this worked both ways. I could not always understand English phrases due to emphasis on different syllables than normal and I also had to concentrate on speaking more slowly instead of my normal very quick speed. In fact, some ward rounds were conducted in English rather than Nepali due to the mixed nationalities of the staff who were mainly Nepali, Indian or Sri Lankan. However, this meant that the patients couldn't understand the discussions about their care during the ward round and so did not know what their treatment plan was. I didn't feel that this was good clinical practice especially as patients were worried about the cost of

treatment and being able to afford their stay in hospital. There were quite a few medical students and junior doctors on the wards so if a patient or their family looked confused, I asked the doctor/ student to explain the treatment plan to the patient. For the most part, it appeared that doctors made a treatment plan and patients accepted anything that was decided. While clerking patients in the gastroenterology ward, I found hand signals and miming very useful. I also learnt a few basic words for pain, where and how long to aid the clinical examinations. Saying pain in Nepali and gesturing over different sites was very effective. Also showing the catheter or cannula to the patient and miming was also useful and the patient was able to understand what the equipment was for.

Total: 1200

## References

1. [http://www.who.int/substance\\_abuse/publications/global\\_alcohol\\_report/profiles/npl.pdf?ua=1](http://www.who.int/substance_abuse/publications/global_alcohol_report/profiles/npl.pdf?ua=1) – alcohol consumption
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4. [https://esa.un.org/unpd/wpp/Publications/Files/WPP2015\\_Volume-I\\_Comprehensive-Tables.pdf](https://esa.un.org/unpd/wpp/Publications/Files/WPP2015_Volume-I_Comprehensive-Tables.pdf)