C. GREEN

SSC 5C - Elective - Gandaki Hospital, Pokhara, Nepal c.b.green@smd10.qmul.ac.uk ha10118

## Elective Report

Learning Objectives:

1. Describe the common illnesses in Nepal that result in in-patient hospitalisation. How do these differ from the UK? Are infective causes more common compared with diseases associated with a sedentary lifestyle?

I have carried out a mixed placement in Accident & Emergency, and General Medicine. The common illnesses that result in in-patient hospitalisation at Gandaki Hospital are varied. There is a high prevalence of diseases that are associated with a sedentary lifestyle, despite the physically demanding terrain and predominantly agricultural employment. Chronic Obstructive Pulmonary Disease (COPD) in Nepal is very common and therefore acute exacerbations are typical — a ward round of 36 patients can easily have 10-15 patients with an "AE of COPD". Interestingly, whilst in the UK COPD is predominantly caused by cigarette smoking, in Nepal it is often the result of wood-burning cookers being used in poorly ventilated village houses. Vascular disease is also a common cause of admission with angina, acute coronary syndrome (ACS), heart failure and cerebral vascular accidents (CVA) being treated almost daily on either intensive care or the general medical ward. This is the likely result of a combination of smoking, obesity, high fat diet and high sugar intake — all similar risk factors to the UK. Alcoholic disease is very common as many Nepalese people brew their own local alcohol called "Roksi", which is often very strong. It is therefore fairly common to see an upper GI bleed from oesophageal varices or alcoholic withdrawal on the general medical ward.

However, in contrast to the UK, Nepal also has a high incidence of infectious diseases leading to in-patient hospitalisation. Enteric fever (caused by Salmonella typhi) is a leading cause of diarrhoea, splenomegaly and dehydration — causing admission. There is an increasing prevalence of HIV in Nepal resulting in many admissions of "unexplained fever under investigation" — most likely due to an opportunistic infection. Finally, tuberculosis is a common cause of admission to hospital in Nepal but interestingly often presents with atypical manifestations, such as cervical lymphadenitis, and even several cases of military TB.

Overall, the causes of in-patient hospitalisation in Nepal are not vastly different to the UK. Although majority of Nepalese industry is agricultural, and the terrain lends to a physically active lifestyle, there is still a high incidence of disease associated with sedentary lifestyle.

2. The WHO ranks Nepal 139<sup>th</sup> in life expectancy compared to the UK, which is 30<sup>th</sup>. Describe the factors that contribute to this in relation to health provision.

Nepal has a mixed healthcare system of either private or government hospitals, although the patient has to pay in full for their treatment irrelevant of their choice of hospital. Initially, I thought this would be a contributing factor to the differences in life expectancy. However, the patient and or their families appear to be able to always purchase the equipment and drugs required to treat the disease. An important difference in Nepal is the attitude towards evidence based medicine. A key example of this is the use of beta-blockers in heart failure. Several studies (e.g. SOLVD) have shown that they have a prognostic benefit for patients with heart failure. However, their use in Nepal is dependent on whether or not the physician has experience prescribing them, which in many cases is unfortunately not the case. This may, in part, begin to explain why the life expectancy is so different in Nepal compared to the UK.

Another difference that I have seen between the UK and Nepal would be standards of sterility. There is a completely different attitude in Nepal towards "infection control". Needles are re-used,

sterile gloves are washed and re-used, and patients are examined on ward rounds without washing hands between patients. Finally, there is a high incidence of trauma in Nepal. Road Traffic Accidents (RTA) are very common and there is currently no model of pre-hospital care. Patients are transported to hospital by relatives and are assessed in Accident & Emergency, without a triage system. This often led to the patient waiting up to 30 minutes before receiving treatment. These factors may partially explain the differences between life expectancy in Nepal compared with the UK.

## Considering the limited provision of healthcare and the problems accessing it, how is the management of acute care delivered.

Acute care in Nepal is delivered very differently to the UK. There are some similarities to the UK, for example the hospital does have an accident and emergency department which is staffed by nurses and doctors of varying experience. However, there is no focus on "the golden hour" or "pre-hospital care".

Patients are brought into the department by relatives and directed to the assessment area. The family are then told to report to the hospital reception to pay 25 rupees before the patient is assessed by the doctor. Once this has been completed, the doctor will issue a prescription for any equipment or drugs that is required. The family then have to go the hospital pharmacy to purchase these before returning to A&E so that the patient can begin to be treated. This delay can often be up to 30 minutes, during which the patient will be left unattended in the department. There is a form of ambulance service available that can be arranged through the police (i.e. at the scene of a RTA), however, they operate a "scoop and run" service and it is often quicker for the family to drive the patient to hospital in their car.

Once the patient has been initially treated, they are then moved from the triage area into the observation area and await review by the medical or surgical team – who are responsible for continuing their care. If the patient is admitted, they are then cared for on the general medical ward. They have a daily ward round by the medical team and are treated there. If they are very unwell the patient can be moved to the Intensive Care Unit (ITU) where there are monitors available and a higher nurse-to-patient ratio.

## 4. Discuss the benefit of living with a local family in a village setting when undertaking medical work in a foreign environment. What key lessons can be learned?

I undertook a week village experience placement in Kolma Village. This involved living with a local family and attending the health post daily. The health post is staffed by auxiliary health care employees that undergo basic training in providing basic healthcare. Our health post served 9 villages, totally approximately 200 patients. Each day we would see between 10-15 patients with complaints including abdominal pain, dysuria, cuts, sprains, fever and injury. The local staff often asked for my opinion and following a brief history and examination, I would suggest a management plan, which was generally adhered to.

I feel that living and working in the same village provided daily continuity with the local population. They were able to see us at the health post, but then also speak with us throughout the day while we participated in our cultural activities. These included visiting the fields of different crops, harvesting tomatoes, teaching an English lesson in the local school, making buffalo butter and grinding millet. As the week progressed we were able to see many of locals at work and at their home. I feel this gained their trust as they were always happy for our input when it came to the health post. Overall, living and participating in the activities and rituals of a local foreign population encourages a mutual understanding and respect to develop, allowing health care to be provided easier.