

## **ELECTIVE (SSC5c) REPORT (1200 words)**

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

On my medical elective I stayed in different regions in the Himalayas. To name a few: Manali, Kullu and Bir in the state of Himachal Pradesh. One of the first things I noticed was that the further I travelled into the mountainous regions, the more that the access to healthcare became scarce. I was working in remote villages of the Himalayas where the closest hospital would be at least a day's drive away. Infectious diseases, which were common in Himachal Pradesh, were tuberculosis, chronic bronchitis, acute respiratory tract infections, malaria, sexual transmitted infections and HIV/AIDs. Most of the medical complaints I saw were related to sun exposure at such a high altitude and also poor patient education and medical resources. The most common general presenting complaint (from patients of all ages) were eye related complaints. Many were myopias or presbyopias and others were ophthalmological conditions of the eyes. The myopias were of course, more common in younger patients and presbyopias more common in older patients. Children who had myopia presented with frequent headaches, eye pain and blurred vision particularly at school or when reading for long hours. Older adults typically complained of blurred near vision. The ophthalmological conditions of the eye included cataracts, pterygiums, viral and bacterial conjunctivitis and corneal abrasions. Cataracts, predominantly being a condition of the elderly were seen more in the older age groups. Pterygiums were seen in a large proportion of patients. They are a benign growth of the conjunctiva which occur from excessive sun exposure. Fully established pterygiums were more common in adults. I saw a few young children who had had high cumulative sun exposure showing early signs of pterygiums. Medical problems particularly in children included inadequate nutrition and failure to thrive, also fungal scalp and skin infections and intestinal worms. Men and women (particularly the elderly) presented with back pain and also arthralgia of the large joints particularly the knee and hip. The likely diagnoses here was osteoarthritis. Most of these patients were farmers and shepherds and their job would involve a lot of heavy lifting and also walking for long distances.

The health care system in the Himachal Pradesh is quite different from that of the UK. The UK is lead by the public health care sector meaning everybody is entitled to free health care and has the option to opt for private health care if wanted. However the UK private health sector is used by less than 8% of the population. In India the healthcare is largely lead by the private sector and used by approximately 70% of the population. However there are government hospitals in India run by individual states. In Himachal Pradesh, the use of the health services used is determined by the standard of living by the household. Generally as the standard of living increases the use of private health services increases. Compared to the rest of India, Himachal Pradesh utilizes the private sector much less (40%) and when a household member gets sick they tend to use the public sector more (60%). The large rural population in Himachal Pradesh, in combination with the adverse geographic and weather conditions means that it is poor in terms of its economy and still recognised as a relatively backwards state. Although improving, it still lacks a great deal of manpower both in quantity and quality. The access to healthcare for the Himachali population is much scarce compared to the access in the UK. The majority of the UK population have access to a hospital or general practitioner within a few miles radius. In Himachal Pradesh, unless people live in the main cities such as Kangra, Mandi, Manali etc access to hospitals is hugely limited. Health care naturally becomes

scarcer from the inner to the greater Himalayas. Himachal Pradesh has a keen interest in alternative medicine (as does most of India). Ayurvedic medicine, something that is not practiced within in the National Health Service in the UK and is recognised as non-evidence based type of medicine.

Trekking in high altitude regions predisposes people (who usually live on ground level) to acute altitude sickness, pulmonary and cerebral oedema. The local people of the Himalayas however, have evolved over time through natural selection and are less likely to suffer these conditions. Their physiological adaptations since birth have allowed them to do so: increased cerebral blood flow, increased lung capacity and decreased haemoglobin concentrations. Living life long at a higher altitude naturally brings you closer towards the sun's UV light. The Himalayan populations have a higher incidence of UV light related eye problems such as pterygiums because of this reason. Other UV light related conditions include malignant melanomas, squamous and basal cell carcinomas. They are directly related to the cumulative amount of UV light exposure. Living in the Himalayas also predisposes patients to musculoskeletal problems. This is because the local populations there carry out a lot of agricultural work as a means of income. There is also less readily available transportation in the mountains and so most people walk to their destinations. Osteoarthritis and back pain are very common musculoskeletal problems in the Himalayas.

It was very interesting and enjoyable to learn and apply clinical skills in a non-traditional setting. I felt that practicing medicine in the Himalayas was very different to practicing medicine in England. I have been used to practicing medicine in hospitals and the primary care setting. In the Himalayas I was practicing medicine in tents, with limited medical resources and dealing with patients who spoke a different language to me. Despite doing some medical work in India in previous years, practicing medicine in the mountains in India was still very different. We set up portable medical camps in several remote villages. The camp was organized into different tents according to specialties: registration, triage, general medicine, paediatrics, gynaecology and pharmacy. Patients would register themselves and their presenting complaint at the registration tent. They would then be sent to the triage tent to have their vital signs monitored. After that they would be advised to the correct tent where we would clerk them with the help of interpreters. Drugs were to be prescribed from a list of medications which we had available to us. The patients would then attend the pharmacy tent where they would receive the medication and advised on the dose, frequency of the medication and precautions to take. We were given more responsibility than we would be in the UK and I quickly became more confident in making my own clinical decisions. From this experience, I have come away being a much more adaptable medic and also more knowledgeable of the more prevalent conditions in the Himalayas.