

Medical Elective in Nepal



Elective report

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Venues

September: Gorkha Municipal Hospital, Gorkha District, Nepal

October: Kanti Children's Hospital, Kathmandu, Nepal

Health & Safety Risk Assessment

I identified several risks before leaving for my elective. These were:

1. Infectious disease and injury
2. Malaria, Japanese B Encephalitis and other endemic diseases
3. Political volatility
4. Crime
5. Offending local customs

I addressed these risks as follows:

1. To minimise my risk of getting gastroenteritis I avoided drinking tap water and eating food from street vendors, etc. I took Ciprofloxacin and Metronidazole in case I did develop an infection. I prepared a basic first aid kit.
2. I obtained the appropriate vaccinations and took malaria prophylaxis. Post-exposure prophylaxis was unnecessary as the incidence of HIV in Nepal is less than 1%.
3. Although the political situation in Nepal has been volatile in the past few years, the foreign office website did not advise against travel and I thoroughly researched the climate before leaving. As advised by the FCO, I avoided large gatherings and public demonstrations
4. I ensured that I always locked my personal belongings up and avoided travelling alone at night.
5. As Nepali culture is much more conservative than ours, I always dressed appropriately, avoiding shorts and sleeveless tops.

Supervisors

UK: Dr Chris Ree

Nepal: Dr Ramesh Bikram Singh, Gorkha Municipal Hospital

Dr Kailash Prasad Sah, Kanti children's Hospital

Aims and objectives

The general aim of my elective was to gain an understanding of the healthcare system in Nepal and to compare it with ours here in the UK. I also sought to improve my clinical skills and to learn about diseases common in the developing world but rarely seen in the West.

The two placements I organised were very different; one was in a small district hospital in the countryside and the other in a large children's hospital in Kathmandu. I chose these extremes in order to compare the provision of healthcare in rural and urban areas, thus gaining a deeper insight into the system as a whole.

Healthcare in Nepal

The public sector is the dominant provider of services, although there are a few private hospitals. Access to healthcare is a big problem. The majority of the population live in rural areas, many in remote and difficult-to-access terrain. Only 65% of rural dwellers live within 1 hour's travel of a public health post and just 10% within 1 hour of a hospital. [1].

The healthcare system in Nepal consists of rural health outposts, small district hospitals and a small number of larger regional or centralised hospitals. When someone becomes ill, the first help they seek is often from their local pharmacy. If this doesn't help, they go to their nearest outpost, and from there the closest district hospital; this may be several days walk from their home. If their condition is serious, they must be transferred to one of the large hospitals. The health outposts are frequently understaffed and very poorly equipped.

The system is very much centralised; most financial and management decisions are made centrally, despite the passing of legislation to allow regional organisation. This

makes it difficult for the highly fragmented population to receive equality of healthcare. Government expenditure on health is meagre (just 6% of the national budget); nearly 75% is met by private sources, mostly foreign aid.

The disease burden consists largely of communicable disease; 50% of the disease burden affects the under fives. The infant mortality rate is 62/1000 and life expectancy is 61.12 for men, 60.75 for women [2].

A large number of the population benefits from Ayurvedic medicine, which has its own department in the Ministry of Health. This is mostly used in conjunction with modern medicine.

First placement: Gorkha District Hospital

Structure and organisation

Gorkha hospital has 15 beds; this capacity is almost doubled during busy periods, when the extra patients are accommodated on rough wooden benches. There is an outpatient “department” which essentially serves as a GP surgery; patients are seen two at a time by two doctors in one room. There is also a delivery room, a treatment room, an emergency room and a very basic laboratory.

There are four doctors and approximately 10 nurses. One of the doctors conducts a morning and evening ward round and one is on call 24 hours a day. There are several “community medical assistants” who conduct their own consultations, prescribe medications and staff the emergency room. This position requires 3 years’ training.

Patients pay for their consultation, inpatient care and treatment. If a patient is over 60 or “very poor”, their care is paid for by the hospital’s poor fund. This decision is made at the discretion of the doctors; there is no formal assessment.



One of the two wards at Gorkha

Conditions seen

I accumulated good knowledge of the common conditions seen in Gorkha hospital (enteric fever, pneumonia and became familiar with their treatment protocols. Saw several cases of TB.

The overwhelming majority of the caseload consists of infectious disease; mostly enteric fever, pneumonia and urinary tract infections with some TB, malaria and cellulitis. Because so many of the population have such limited access to healthcare, people present at a much later stage of their illness than they do in the UK.

Due to the extremely limited laboratory facilities, much of the diagnosis is clinical; there is no culture facility and the basic tests that are performed are rarely relied upon. Infections are therefore treated empirically according to national protocols. A “syndromic approach” is often taken due to this absence of diagnostic resources. For example, any woman who presents with vaginal discharge is diagnosed with “Vaginal Discharge Syndrome” and prescribed a cocktail of antibiotics to cover Gram positives, Gram negatives and anaerobes, plus an antifungal.

Deliveries were all conducted without any form of analgesia and most women received episiotomies to reduce the risk of serious tears.

Clinical skills

Unfortunately, due to the language barrier I was not able to practice my history taking skills. I did however examine many patients on the wards; I improved my auscultation skills, particularly the recognition of clinical signs relating to different stages of pneumonia. I also assisted at several deliveries, and gained my first experience of wound dressing and cleaning.

I saw several children with fractures; the approach to these was rather primitive. After being X-rayed all fractures were reduced, even greenstick fractures. IV ketamine was administered as a dissociative, which resulted in hallucinations in the older children – this was distressing to observe as their hallucinations caused them to scream repetitively, although they never seemed to remember the experience. The first case I was present for made me very light-headed and I had to leave the room, but by the end of the placement my stomach was strengthened and I was able to assist in all the reductions; I considered this quite a personal achievement as I had been considerably phobic of broken bones since breaking my arm as a child!

Patient satisfaction questionnaire

With the help of an interpreter, my colleague and I conducted a patient satisfaction questionnaire (a proforma is included overleaf).

Methods

We included all patients being discharged from the inpatient wards over a 2 week period. We asked 100 patients to score various aspects of the hospital's service, with the aim of providing the doctors and other staff with feedback and identifying areas which could be improved. Where the patient was below the age of 16, we asked a parent to complete the questionnaire.

Patient satisfaction questionnaire

Demographics

1. Age:
2. Sex:
3. Ethnic group:
4. Educational level: None/primary/lower secondary/upper secondary/above
5. Literacy: Can read and write/can write/can read/illiterate
6. Distance travelled: less than 3km/3-6km/over 6km

Score the following areas from 1 - 5

(5 = very good; 4 = good; 3 = OK; 2 = poor; 1 = very poor)

7. Are the opening times appropriate?
8. Did the doctor listen?
9. Did the doctor give time?
10. Did the doctor explain the diagnosis?
11. Did the doctor give good advice and treatment?
12. Were nurses and other staff friendly and helpful?
13. Are the prices fair?
14. Is the building clean and neat?
15. Is the level of privacy adequate?

Open questions

16. What did you like most about the hospital?
17. What do you like least about the hospital?
18. What do you think could be improved?

Ethical considerations

We first obtained permission to conduct the questionnaire from the chief medical officer. We anonymised all data collected. Each patient was asked for verbal consent and informed that their personal information would not be used.

Results

Demographics

- 55% of patients included were female and 45% male.
- The average age was 30.
- There were 14 different ethnic groups
- Excluding patients below school age, 37% of the women and 66% of the men were literate
- 50% patients had travelled over 6km to reach the hospital

Scored questions

Question	Average score
7	3.3
8	3.7
9	3.7
10	3.7
11	3.4
12	4
13	3.9
14	2.9
15	3.5

Open questions

- Areas most commonly identified as being “liked the most” by patients were treatment and nursing.
- Areas most commonly identified as being “liked the least” were the number of beds, the condition of the toilets and the facilities for poor people, although most patients said “nothing”.
- Suggestions for improved mostly included more beds, more toilets, and better cleaning, although again most patients said “nothing”.

Potential for bias

Because we used an interpreter, we had no control over the way in which the questions were asked of patients. Bias could have been introduced through the interpreter leading patient’s answers. Another potential for bias comes from the fact the interpreter was a volunteer at the hospital, and could therefore have made patient’s replies sound more favourable. Also, because the questionnaire was conducted at the hospital rather than on neutral territory, patients may not have given their true opinion – particularly as nurses and other patients could hear their replies.

Discussion

Firstly, our questionnaire illustrated the difference in patient demographics between Nepal and the UK; there were very few elderly patients. This reflects true differences in population demographics; only 3.6% of Nepal’s population are over 60, compared to 15.7% in the UK [3,4]. Our results also

reflect one of the many gender disparities of the country – the literacy level is much higher in men than in women.

Patients were generally happy with the services provided by the hospital. Lowest scoring areas were opening times, advice given by the doctor and cleanliness of the building. Scores for cleanliness and privacy were a lot higher than I expected; I think that this is because of sanitary and cultural differences, respectively, between Nepal and the UK. To my Western eye, the state of the hospital was disgusting; however, the general standard of living in Nepal is lower and therefore people's expectations of the hospital's cleanliness will be lower. As regards privacy, the absence of curtains around beds would be unacceptable in the UK; in a country like Nepal, where people often wash in public and several families may live in the same house, this is not so much of an issue.

The areas identified for improvement were, unfortunately, ones that cannot easily be addressed – more beds, toilets and facilities require more money which is, needless to say, already in short supply.

Personal observations

I found some of the attitudes towards patient care at Gorkha rather challenging. An elderly lady presented in outpatients with joint pain and shortness of breath. She was very anxious and confused; I think she may have been suffering from dementia. The doctor diagnosed her with “postmenopausal syndrome”, explaining that women “go a little bit crazy” after the menopause. Several other women presenting with similar symptoms were also given this diagnosis; they were simply given painkillers and discharged. This was not a diagnosis given to women who had just gone through the menopause; the women we saw were in their 70s and 80s. It seemed to me that it was a label used to dismiss confused, osteoporotic elderly women who were no longer the invaluable domestic workhorses they were in their younger years. I personally felt that this was a reflection of the attitude towards women; although a lot more visible and participant in society than in neighbouring India, their incredibly hard work is not sufficiently recognised.

The concept of whole person care was totally absent. Comprehensive histories were never taken; all focus was on the symptoms. For example, women presenting with symptoms of pelvic inflammatory disease were never asked a sexual history; there was no awareness of sexually transmitted infections.

Another case that really stuck in my mind was that of a young teenage girl who was admitted with multiple abscesses. As well as having lesions in a number of different sites, she had several scars of a similar size. My concern was that she could be immunocompromised or possibly a victim of abuse; when I raised these concerns with the doctors they were dismissive, their only objectives being clearing the infection and getting the bed vacant. On reflection, I appreciate that such attitudes are more understandable when working in an environment in which resources are so scarce. I also believe that subjects such as abuse and HIV need to be much less of a taboo so that they can be appropriately addressed.

Mental health is another area that is massively neglected. It is very little talked about because of the stigma attached; it receives barely significant attention from the Government, which spends about 1% of the total health budget on mental health services. The majority of healthcare facilities across the country offer no specific mental health services whatsoever; those which do exist are disproportionally located – for example, 80% of the psychiatry beds in the country are located in or near the capital city [3],[4].

We also visited a small private hospital in Gorkha, which had been set up by two young doctors. As one would expect the hospital was far better equipped and much cleaner than the government hospital. The patients were obviously more wealthy and educated. The doctors were much more committed and enthusiastic; however, this was inevitable given that the hospital was established through their personal investment of time and money. In the government hospital morale was understandably low given that they work with such massively limited resources. My experience of the private hospital and the differences I observed between it and the government hospital highlighted the need for equality of wealth and education in order for there to be equality of healthcare.

Suggestions

Elective students and volunteers have been visiting Gorkha hospital for several years; the problems they highlight are always the same but little is done to address them. Of course, many of the problems are due to a lack of funding. I am pleased to report that there was a lot of painting being done when I was there; the need for this was stipulated in the elective reports of previous students. Other areas which need urgent attention are:

- Hand washing facilities need to be improved; there are no hand basins on the wards.
- The floor is broken and uneven, making it very difficult to clean and push trolleys.
- The toilets are very dirty, which is a massive problem given that so many of the patients are suffering from diarrhoeal disease

Medical notes are written when the patient is admitted, but not updated on the ward rounds (excluding drug charts, observation charts etc.). It would make for better continuity of care if the notes were added to on each ward round.

It would be helpful, particularly for visitors to the hospital, if the staff had some form of identification, as it was often difficult to know who was an employee and who was a patient.

Second placement: Kanti Children's Hospital, Kathmandu

Organisation and staffing

Kanti began as a general hospital, established in 1963 under Soviet patronage. In 1970, it became the only specialist paediatric centre in Nepal. Like many other parts of the country's infrastructure, the hospital is largely reliant on foreign funding to supplement the yearly Government budget. Although 42% of the population is less than 14 years of age, there are only 1000 paediatric beds in the whole country, 300 of which are at Kanti. For whatever reason, the Government invests far more money in the large adult hospitals.

Some of the hospital staff are provided by the government; these staff are changed every 2 years. Other staff are contracted by the hospital.

209 of the 300 beds are free or partially free, the remainder are paying beds. The only difference between the free and paying beds is the cleanliness and tidiness; patients receive the same care. Medication and surgery must be paid for unless, as in Gorkha, patients are very poor - no person is turned away because they cannot pay.

Kanti hospital includes the following departments: Emergency, Oncology, Cardiology, General medicine and surgery, nephrology, acute respiratory medication, oral rehydration department, NICU, PICU.

The outpatient department is separated into medical and surgical sections. As well as providing follow-up appointments for discharged patients, the outpatient department operates in a primary care capacity, as in Gorkha. When the OPD is closed, the Emergency department takes on this role.

The hospital plays a big role in training local medical students, as well as accepting many foreign students for electives and volunteer work.

Kanti operated in a similar way to Western hospitals, so my experience of the hospital was similar to my experience as a medical student back home.

Conditions seen

I observed many interesting cases at Kanti. Particularly interesting was that of a young girl who presented in the Emergency department with fatigue. On first appearances the girl looked about 4 or 5 years old, although her facial features were very coarse. However, her parents revealed that she was in fact 11 – she was showing profound features of growth failure. Further history taking elicited that she was deaf-mute and had displayed massive developmental delay. A provisional diagnosis of congenital hypothyroidism was made, pending investigations. On examination, her skin was very dry and she had slow relaxing reflexes; a provisional diagnosis of congenital hypothyroidism was made, pending investigations. This case was a shocking example of the stark contrast between healthcare in the developed and developing worlds; in the UK, this girl would have been identified as having hypothyroidism at birth and prompt treatment would have enabled her to lead a normal life.

Another, similarly affecting case was that of a 3-year-old boy who clearly had a genetic syndrome of some description; he was dysmorphic, showed signs of growth delay and displayed repetitive movements of his hands. He also presented in the Emergency department, but with symptoms of an upper respiratory tract infection. The history revealed gross developmental delay; he could not walk and had never started talking. Although he had been previously seen at a hospital, his parents had mislaid the notes and could not remember the outcome. Again, the same baby in the UK would have been diagnosed at birth; in Nepal, 90% of babies are born at home, with no skilled health worker attending, and there is no national system of antenatal or postnatal care. Very poor education and awareness of health and disease exacerbates this situation; parents may not recognise that their child is not normal, or not realise that help is available.

Urban versus rural healthcare

The differences between Kanti and Gorkha hospitals reflect the inequality of healthcare provision between rural and urban Nepal. Its comparative wealth of facilities and staff is indicative of the highly urban-centric distribution of funds. This seems ridiculous in a country where 86% of the population live in remote rural areas. Rural areas are massively understaffed; many of the nurse and physician posts are vacant. Staff morale is understandably low in these areas, where they simply do not have the resources to provide their patients with a good standard of care. The contrast between attitudes of staff in Gorkha and Kanti was huge – in Gorkha the doctors almost seemed to be waiting out a sentence, whereas at Kanti they were very enthusiastic. This is understandable; in Gorkha the doctors are forced to be generalists and interesting cases must invariably be referred to higher centres, whereas at Kanti they are working in a far more stimulating environment in specialties they are passionate about.

Because people from rural areas have to travel great distances to get to tertiary health centres, they may not be able to stay long enough to receive their treatment because of commitment to their family in the countryside. A particularly poignant example of this was the story of a father who had brought his son to Kanti to receive treatment for acute lymphoblastic leukaemia. Although the hospital offered the treatment

free, the father could not afford to stay in Kathmandu; he had to return to his village to continue working and providing for the rest of his family. He was forced to sacrifice one son's life in order to safeguard the lives of the other family members.

There are also some similarities, most of which relate to lack of resources; in both Gorkha and Kanti gloves were washed, resterilised and reused.

Problems faced by the health system

Several factors contribute to the constraints and challenges faced by the Nepali health system. Lack of trained manpower and inadequate infrastructure are obvious; however one of the biggest problems is inadequate management. An example of this poor management is the 2-yearly rotation of government medical staff; this prevents effective continuity of care. I came across a particularly dumbfounding example of this system at Kanti: a specialist paediatric oncologist who was vital to the oncology department of the hospital (which is the only such department in the country) was being transferred to another hospital where his specialist expertise would be completely wasted.

Another problem is the lack of stored patient information outside of the large urban hospitals. Patients keep their own outpatient notes so if these are lost; there is no record of their past medical history. No doctor can ever be in possession of a patient's full clinical picture. If hospitals were able to communicate with each other and keep a record of each patient's visit, care would be much more coordinated and consistent.

Unfortunately, corruption is endemic in Nepal, and the health system is not spared. Several doctors told us that often money is diverted before it gets to the patients. In both placements, I came across "directors" trying to make trouble for the doctors responsible for elective students, I believe that reason for this was that they wanted a slice of our fee – this may sound rather cynical, but corruption is a very real problem.

Ethical issues

I feel that several of the scenarios I have discussed involve ethical questionability - the girl with multiple abscesses should have been investigated further; it was not in her best

interests to treat only her infection and then discharge her. In the UK, such a case may even have involved child protection.

It could be argued that the cursorness of history taking and examinations in Gorkha was unethical, particularly when the health of others could be at risk, as is the case with sexually transmitted disease.

We were rarely introduced to patients as students; in one particular case when a doctor asked me to perform a vaginal examination on a young woman with severe pelvic pain I refused, because she was clearly very distressed and had no idea who I was. The doctor could not understand this; on reflection I think this was because the doctor-patient relationship is so paternalistic in Nepal – patients are rarely involved in decisions about their care and consent is rarely informed.

It would be unacceptable to have more than one consultation per room in the UK; the OPD in Gorkha was sometimes more of a social gathering than a doctor's surgery! Clearly, patient confidentiality and data protection are not major concerns in Nepal.

Conclusion

There are many differences between the healthcare systems in Nepal and the UK. Whereas our services are free at the point of care, people in Nepal usually have to pay for consultations, inpatient stays, medication and operations. The only similarity is that, like here, patients do not have to pay for prescriptions in certain circumstances – although there is no organised system for this in Nepal, unlike the system of HC2 forms etc. in this country.

The first point of consultation for patients in the UK is of course a GP surgery; for most people in Nepal it is a pharmacy or small health post, where there may not be a qualified practitioner. The absence of a properly organised primary care system means that there is no continuity of care, and makes chronic disease management very difficult for the majority of the population. The system of Primary Care Trusts in the UK means that healthcare is organised and managed at a local level; in Nepal, most management and finance decisions are made centrally.

Here in the UK, where a person lives does not usually prevent them having easy access to a doctor; in Nepal, this is commonplace. Through spending time in two very different hospitals, I have experienced first-hand the inequality between rural and urban healthcare in Nepal.

The healthcare system in Nepal faces many problems, as I have discussed. I think that one of the most important issues is the lack of health education and awareness within the population.

During my elective I was able to improve some of my clinical skills; I also learnt about conditions such as enteric fever, TB and malaria which I am unlikely to be frequently exposed to in the UK. Through the teaching provided by the doctors at both hospitals, I gained a deeper understanding of communicable diseases, including their biochemistry profiles and treatment protocols.

Personal reflection

My experience in Nepal was not only medical; living in a country with a completely different culture broadened my outlook on several aspects of life. For example, I have always been rather dismissive of religion – for many people in the UK, it is not an important part of life. I found it fascinating to learn about and experience religion in a country where it is so central to peoples' lives; it made me realise its importance, for better or worse, throughout the world.

In Gorkha, my colleague and I stayed with a local family, which was a brilliant cultural experience I feel very privileged to have had and which allowed me to learn about Nepal in a very real way. They were incredibly welcoming and lots of fun. One of the daughters was sitting the equivalent of GCSEs during our stay. Her dedication was amazing; we learnt through her that to attain scholarships and thus be able to continue with education she would have to get top grades. This was very humbling and made me realise how often we take our education for granted in the UK. The 18-year-old son had had a pituitary tumour some years ago and as a result has not yet been through puberty. His treatment cannot be provided in Nepal; he must travel to Delhi to receive the massively expensive hormone injections that he needs. Although reasonably well-off by

Nepali standards, the family can barely afford the treatment. This highlights how difficult it is for people with chronic conditions which require years of medication.

At the risk of sounding clichéd, my experience highlighted how lucky we are in the Western world to have access to basic amenities such as clean water and electricity, as well as to excellent healthcare.

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