J. Skinner ACCIDENT + EMERGENCY

Medical Elective Reflective Report
Ho Chi Minh City, Vietnam

Oxford University Clinical Research Unit – Tropical Medicine
Cho Ray Hospital – Accident and Emergency

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Introduction

One of my main reasons for undertaking a medical elective abroad in a country such as Vietnam was the opportunity to be exposed to diseases that I would not necessarily get the chance to see back in the United Kingdom (UK). Ho Chi Minh City is situated in the southern half of Vietnam and is home to more than 7.5 million people.

Cho Ray Hospital was established in 1900 by French colonialist, originally named Minicipal de Cholon. Over several decades the hospital was enlarged until 1957 it was finally named as Cho Ray Hospital becoming state owned and under the control of the Ministry of Health.

Cho Ray hospital is one of the biggest hospitals in Vietnam, it has 1708 beds but its' capacity is generally exceeded with approximately 2700 inpatients being treated in the hospital at any one time. Cho Ray hospital itself has a large catchment area, serving patients predominantly from the 22 southern provinces of Vietnam. There is a great diversity in geography between these provinces, ranging from the city of Ho Chi Minh to the agricultural lands surrounding all of which adds to the potential of variable conditions that might be encountered in the accident and emergency department. This can vary from snake bites and malaria in the country side to motor bike accidents and acid burns in the city. Cho Ray hospital is a teaching hospital and is linked to Ho Chi Minh city University of Medicine.

Oxford University Clinical Research Unit (OUCRU) was established in 1991 in conjunction with The Wellcome Trust, The Hospital for Tropical Diseases and the Health Services of HCMC. Over the last two decades OUCRU has been providing clinical research which has had a direct impact on both the people of Vietnam and has been used globally.

What are the prevalent tropical diseases in Vietnam?

My placement at OUCRU was a fantastic learning experience, enabling me to fulfill one of my main learning objectives; what are the prevalent tropical diseases in Vietnam? The Hospital for Tropical diseases and staff at OUCRU allowed me to witness a plethora of diseases and their complications. These were not just disease confined to tropical medicine, but there was also a heavy case load of infectious diseases such as HIV patients

that were seen daily on the ward round. This was an invaluable experience with regards to my future clinical practice. I was able to see many unusual and rare complications from opportunistic infections in this patient group, such as cryptococcal retinitis being one example. This was something I had not personally experienced in the United Kingdom, there are several factors that can account for these differences seen in the UK. In Vietnam it is apparent that there is still quite a stigma attached to a diagnosis of HIV/AIDS and this clearly has an impact on compliance with treatment, medication and seeking diagnosis.

There were many memorable infectious diseases seen whilst on elective in Vietnam, including; Dengue fever, hand foot and mouth, malaria falciparum & vivax, toxoplasmosis, pneumococcal meningitis and tuberculosis to mention a few. One of the most difficult of these to deal with however was a case of neonatal tetanus. As a complication the patient had experienced a hypoxic event, leaving the patient blind. This then resulted in the patient being orphaned by their family as they could not afford the medical treatment. This case was particularly harrowing and stands out for me because neonatal tetanus in the UK is rarely seen due to rigorous vaccination programmes. The fact that this is a preventable disease with a simple primary care intervention such as a vaccination, this makes this case even more upsetting. Prior to arriving in Vietnam I had no appreciation of the work that had gone in to significantly lower the malaria deaths rates in HCMC. Whilst at OUCRU it was made apparent that there had been a drive over the last 25 years to reduce the number of deaths from this disease, this can be attributed to and was achieved through invaluable research that had been conducted by staff at OUCRU. On f\reflection this demonstrated to me how much of an impact at research unit can have in a developing city such as HCMC.

What is the role of the Western research unit?

From my time spent with the staff at OUCRU and The Hospital of tropical diseases, it was clear that everyone had a similar goal, improving the health outcomes for individuals in developing tropical countries such as Vietnam. The relationship between OUCRU and the hospital was symbiotic. The unit was able to study diseases seen at the hospital and through research provide hospital staff with up to date evidence based medicine for the treatment of these complex patients. This was achieved through excellent team work and with a clear understanding of one another's roles.

How does emergency and trauma medicine differ from the UK?

Starting my placement in Cho Ray in A&E and being aware of the high numbers of trauma patients I braced myself for a hectic environment, expecting to see a lot of trauma which was managed with minimal resources. I thought that interventions such as magnetic resonance imaging and laboratory tests routinely used in the United Kingdom would be non existent in Vietnam but this was not the case. All investigations were readily available for doctors to use. They were however not routinely requested as patients had to pay for treatments and therefore the doctors tried to keep investigation and interventions to a minimum.

The A&E department in Cho Ray is much like any major hospital, a hub of activity with a constant trickle of patients being admitted through triage or being brought straight in to resuscitation by ambulance. The most striking difference between hospitals in the UK was the number of major trauma cases that were seen throughout a day shift. This ranged from simple limb fractures, open comminuted fractures to major head injuries. Patients were frequently intubated immediately on arrival into resuscitation, sometimes whilst still being very combative and often without sedation.

Vietnam and Ho Chi Minh in particular is known for its motorcycles, the number of people that drive them through the cities and its busy streets. This busy chaotic lifestyle is reflected by the number of trauma cases that are admitted through Cho Ray each year. With 25.3% of all admissions being related to trauma, it is the highest cause of admission, closely followed by patients presenting with a cancer/malignancy at 18.1% per annum. This was one statistic that I found particularly high and relatively unusual in comparison to the UK. I had not expected to see so many cases of malignancy with first presentation at the A&E department. I think this could potentially be attributed to the nature in which individuals in Vietnam are less likely to present early on in the disease process to hospital or practitioner. I was surprised to see that cardiovascular disease only accounted for only 13% of admissions.

What are the main differences between the health care in the UK compared to Vietnam?

The information I had gathered prior to starting my placement in Vietnam had prepared me to find a healthcare system in a developing Communist country that sees vasts amount of trauma and manages these cases with fairly limited resources. Along with high trauma rates Vietnam is still a developing country and although deep poverty rates in Vietnam are reported as being supposedly lower than the likes of China and India there are areas in HCMC where people still live off less than $1 a day. The agricultural industry also still provides a high proportion of the employment for many individuals living in Southern Vietnam. Taking all of these factors into account I had anticipated on being exposed to a variety of diseases which were reflective of the poverty described and the tropical location of HCMC.

Through my experiences at both Cho Ray and OUCRU it was quite apparent there seemed to be very little provision in terms of primary health care services or community interventions, as many people would attend their local hospital as first port of call when they became ill. There were however many similarities that could be made between Cho Ray and any large London teaching hospital. It had all the departments you would expect to find in any teaching hospital, from; neurosurgery, ear nose and throat or palliative care, Cho Ray hospital had everything a Western hospital had to offer. This was something I did not expect to find in a country that is still developing such as Vietnam.

Through time spent in both hospitals it was clear to see that infection control was not a stringent as that in the UK. Most wards were heavily occupied, in A&E and on the wards

patients would often be sharing beds with one another. There was alcohol gel provided at some of the bedsides but washing facilities were not always available on each ward. Restraints are all commonly used on patients both in ICU/PICU and in A&E, and patients on PICU are generally sedated to make them more manageable for the nursing staff. This then had the impact of making an assessment of their neurological function a lot harder.

Conclusion

Study and being involved in foreign health care system in two very different hospitals has been an absolutely amazing and invaluable experience for me. I have seen so many diseases while on placement in Vietnam, some of which I had only previously read about in text books. It has been very interesting to gain an insight into how research in a foreign country is conducted and how the clinicians go about working with local hospitals to conduct research that then has an impact at a global level. This cannot be seen more clearly than through the work that OUCRU has done to reduce malarial death rates since it was established in 1991. To also work outside of my own comfort zone in a foreign county where the majority of patients and doctors do not speak English has been a challenge at times.

To gain experience in one of the busiest hospital such as is Cho Ray has been a real eye opening as to what medicine can be achieved with very limited resources and has hopefully prepared me for my foundation post in acute medicine. It has also emphasized that in medicine a diagnosis can still be made based on the clinical history and examination alone and that investigations only help to confirm this. I have a great deal of respect for the doctors working in Vietnam as they are subjected to a constant flow of complex emergency medicine.

Vietnam, HCMC, CHo Ray and OUCRU will be most remembered for snake bite ward rounds, seeing patients with malaria, looking at their blood films in person in the laboratory prior to seeing them on ward round. It has been a truly amazing and unforgettable experience.