

Elective Report: Iquitos, Peru

I spent my elective at the Hospital Regional in the Loreto district, located in the Amazon Rainforest and which is the main hospital used to serve the Peruvian Amazon. I was fortunate to gain exposure to different specialties.

Describe the pattern of disease Peru and discuss how this differs from the UK if at all.

What was immediately apparent on my arrival at the Hospital Regional de Loreto in Iquitos was the stark disparity in common presenting complaints from that seen in the UK. Particularly evident was the increased prevalence of communicable disease, and of presenting complaints relating to poverty. Common presentations to the hospital included tuberculosis, dengue fever and malaria. Whereas cardiovascular disease and cancer lead to a large proportion of death in the UK, communicable disease, maternal, perinatal and nutritional diseases account for over thirty per cent of mortality across Peru. (Non-communicable diseases account for sixty per cent of mortality in Peru, as compared to eighty-eight per cent in the UK.ⁱ) In the Hospital Regional de Loreto, symptoms that sufferers of these conditions might be expected to experience were well documented and publicised as posters for patients, relatives and hospital staff to see in the form of posters. Although there were quite a few cases of Dengue fever on my placement, I was informed that the previous summer had witnessed a large outbreak of dengue fever, necessitating corridors to be used to accommodate patient beds.

There has been some evidence to suggest that changes in climate may be to blame for recent increases in outbreaks of certain communicable diseases. Not only does global warming affecting natural habitats, but the advent of incremental temperature rises has also seen increases in transmission of disease, with World Health Organisation data estimating that increases in temperature of 1-3 degrees Celsius precipitates an extra 25,000 cases of dengue fever worldwide.ⁱⁱ

Although there are fewer individuals living with HIV in Peru as compared to in the UK (78,000 estimated in Peru compared to 94,000 in the UK), the number of deaths due to AIDS in Peru far exceeds that in the UK. Whereas below five hundred deaths are estimated to have occurred in the UK 2011, the estimated number in Peru is three thousand.^{iii iv} Injuries account for 10% of mortality in Peru as compared to 4% in the UK according to 2011 figures. During the time I spent in the Emergency Department and in the surgical Intensive Care Unit, a great deal of the trauma I saw was due to road traffic accidents. Motorcycles are a major form of transport in Iquitos. However it is unfortunately rare to see helmets being worn. When asked the reason for this a patient who had been involved in a motorcycle accident explained to me that the predominant reason for this was the heat.

Other conditions I saw included leptospirosis, blastomycosis and leprosy (rare, both in Peru and in the UK). AIDS and HIV-related opportunistic infections such as *pneumocystis jiroveci* pneumonia and toxoplasmosis were also seen.

Describe the pattern of health provision in Iquitos and Peru and compare and contrast this with other countries or with the UK.

Peru spent \$496 per capita on healthcare in 2011 and 4.8% of its gross domestic product, as compared to a spend of \$3322 in the same year in the UK and 9.3% of its GDP.^v

There are a number of ways via which healthcare can be paid for: through taxation from regular work, by paying insurance to cover hospital treatment, or by paying for treatment directly. It tends to be individuals who are less well-off who have to pay for the treatment directly and, as can be imagined a significant amount of the time this proves quite difficult to do. As such, patients may present later, which has a detrimental effect on their treatment and improvement or prognosis. Additionally, patients may opt-out of certain treatments to avoid the cost.

One particular case I saw was that of a two year-old boy diagnosed with bronchiolitis, and who was suffering with recurrent (and slowly worsening) episodes of shortness of breath. Due to a shortage of doctors the family was advised to go to Lima, the capital, for further investigation and management but unfortunately were unable to afford the cost of travel. Iquitos is only accessible by water or air, and being the main hospital in Amazonia patients can travel for several days to receive medical care. Another striking case during my stay was that of a thirteen year-old girl who had travelled alone for six days up the river in order to receive treatment.

The lack of resources meant that even more emphasis was likely to have been placed on diagnostic skill and accurate clinical judgement. There were no MRI scanners. Gloves, ethanol gel and face masks weren't as readily available. Patients also provided their own bedsheets.

What differences are there (if any) between the prevalence of stroke-related deaths in Peru and in the UK, and how they are dealt with.

The prevalence of stroke in Peru is significantly lower than in the UK. In 2002, 8,084 individuals died from stroke, compared with 59,322 deaths in the UK. Whilst the management of stroke is not too different, the Hospital Regional being the only hospital in the region must make it harder for patients to get immediate treatment if they are travelling from far away.^{vi}

Improve planning management in preparation for FY1, reflecting on experiences.

My stay at Hospital Regional showed me the importance of taking the whole patient, and not only their condition, into account. There were a variety of factors to consider: what sort of management the patient would require, whether they would be able to afford it and which other options were available if they could not, how far they had travelled and how easily they could access follow-up treatment and how to facilitate this or ameliorate accessibility to treatment if they were coming from far away. Perhaps more than ever I have been made acutely aware of the salience of taking into account social circumstances of individuals. I also had the opportunity to practice formulating management plans for patients, focusing on prioritisation of tasks, which I hope will benefit me when I begin my FY1 year.

As Spanish was the main language spoken, communicating with patients could sometimes present a challenge. However, over the course of my stay I was able to pick up a lot of medical terms. I hope to be able to take this further and learn more Spanish, and be able to understand better when I may be faced with Spanish-speaking patients in the UK.

The Hospital Regional afforded me the opportunity to be able to see many conditions that are either rarely seen or not present in the UK, together with the social and financial ramifications of requiring medical treatment for individuals living in Iquitos. I very much enjoyed my time there, and hope that the many things I learnt will help me in my future career.

ⁱ WHO (2011) Peru: Statistics 2011 [online]. Retrieved 5th June 2013. Available at:
http://www.who.int/nmh/countries/per_en.pdf

ⁱⁱ Longmore, M., Wilkinson, I., Davidson, E., Foulkes, A., Mafi, A., (eds) 2010. *Oxford Handbook of Clinical Medicine*, 8th ed. Oxford University Press

ⁱⁱⁱ UNAIDS (2011) Peru HIV and AIDS estimates 2011 [online]. Retrieved 5th June 2013. Available at:
<http://www.unaids.org/en/regionscountries/countries/peru/>

^{iv} UNAIDS (2011) United Kingdom of Great Britain and Northern Ireland 2011 [online]. Retrieved 5th June 2011.
Available at:

<http://www.unaids.org/en/regionscountries/countries/unitedkingdomofgreatbritainandnorthernireland/>

^v WHO (2011) Peru: Statistics 2011 [online]. Retrieved 5th June 2013. Available at:
<http://www.who.int/countries/per/en/>

^{vi} WHO Mortality and DALYs