SSC COVER SHEET

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Elective 2017 Report

What are the most prevalent diseases in Peru, and how does this compare to the UK?

Communicable diseases are the biggest cause of death in Peru; with TB being particularly problematic. This has been attributed to patients presenting to pharmacies, who have the power to prescribe antibiotics, instead of their doctor. Their symptoms are misdiagnosed for another bacterial LRTI and amoxicillin is prescribed, only having the effect of dampening down the patient's symptoms, giving the illusion that the bacteria is being eradicated, therefore allowing the patient continue spreading TB unknowingly.

Another long-standing prevalent infectious disease is Dengue fever, with recent few cases of the Zika virus. Just before my arrival in Peru, there was widespread flooding in Peru which saw 85 people dead, and tens of thousands displaced from their homes, and I was able to see first-hand the effects it had on their houses, or what was left of them. This flooding brought a surge of leptospirosis and gastroenteritis due to contaminated flood water which also left bacteria behind within sand after the water had evaporated, which is then inhaled.

Leptospirosis, colloquially called "fiebre de la rata" (rat fever), is an infection caused by bacteria contained within the urine of infected animals. Public health leaflets were distributed in Hospital Florencia de Mora detailing its mode of transmission, symptoms, and how to avoid catching Leptospirosis. When I was in Hospital de Alta Complejidad, the hospital that accepts referrals from Florencia de Mora for more serious cases, I saw an otherwise healthy teenage patient who had been hospitalised for Leptospirosis, indicating that leptospirosis does not discriminate against the very young or the very old. There were also countless patients that came through Florencia de Mora with symptoms of gastroenteritis, attributed to the flooding. Even many of the medical students working with Medical Electives, myself included, were struck down at some point with nausea, vomiting and/or diarrhoea!

While TB is the biggest killer in Peru, ischaemic heart disease claims the most lives in the UK, owing to the increase in sedentary living and other risk factors such as poor diet and smoking. Despite the biggest killers differing between the UK and Peru, the diseases that cause the largest amount of morbidity are remarkably similar in both countries, namely cardiovascular diseases, cancer, diabetes and hypertension. Peru has similar rates of risk factors including raised blood pressure, obesity and tobacco use. This doesn't surprise me as during my time there, I found it exceedingly difficult to find food that didn't have a large amount of salt, fat or carbohydrates in it. There is also a large consumption of fruit juices in Peru, which is readily available everywhere. I ended up frequenting the same place every day for dinner as it was the only place that served chicken with salad, and only salad! I also saw the result of a high carbohydrate diet through the large amount of cases of diabetic ulcers, necrosis and limb amputation on the wards.

Describe the healthcare system in Peru, and how it compares to the UK

There are 5 sectors that provide healthcare in Peru – three are for civilians and two are for military personnel. I will go into detail on the three civilian sectors, namely MINSA, EsSalud and the private sector. Es Salud is the biggest sector by a small margin, treating 40% of the population, whereas MINSA treat 35% and the private sector caters for 25%. On the surface, this sounds good as it seemingly does not exclude anyone from having insurance coverage for healthcare, just like the NHS.

EsSalud treats those in formal work, and the health insurance is paid for by their employers, and this comes from 10% of the employee's salary. If one then retires, EsSalud takes 4% of the pension. So what happens if you suddenly lose your job? There is "seguro por tiempo carencía", an insurance that covers for time out of work. The length of coverage depends on the length of time the patient

has been working for his/her company; the longer the employment period, the longer the cover. For example, 6 months of employment gives 3 months of insurance cover, whereas 2 years of employment gives you 1 year.

Insurance will cost employers more if the employee has pre-existing medical conditions, and as a result, it was blindingly evident from my time in Peru that young, healthy people are more likely to be in work, than their older counterparts. Additionally, if time off work is needed for medical reasons such as receiving chemotherapy, only medium- to large-sized companies are willing to continue paying insurance during the time taken off, whereas those working for small companies are often asked to leave the job and come back once treatment has been completed!

MINSA (ministerio de salud) is the most interesting health sector to me. This sector caters for the poor and those in poverty, and is the only one to address epidemic illnesses. As mentioned in the previous section, TB is a huge problem in Peru, and MINSA combats this by making door-to-door visits to ensure all the members of the household, particularly young children, have had their TB vaccinations. MINSA have also set up a system whereby citizens can report to them suspicions, or confirmation, of someone having TB.

In the UK, TB treatment is done on an outpatient basis, and is built on trust that the patient will be adherent to the treatment schedule. However, in Peru, patients with TB are kept in quarantine for the entire 6 months it takes for treatment to be completed. Should they be allowed to go home instead of quarantine, they still have to come in every morning for their medication, and psychologists assess their commitment to the programme in order to decide whether patients can be relied upon to present every morning.

So what happens if a patient does not have insurance? The charge incurred for treatment increases, depending on which healthcare system you find yourself in. I was amazed to hear that if paramedics are called to attend to someone who they deem to be well-dressed and likely to have money, the patient are apparently taken preferentially to a private hospital so that paramedics can be issued a commission!

So although at first glance the healthcare system in Peru seems to be all-inclusive, just like the NHS, it disadvantages those with chronic medical conditions and those who work in small businesses, whereas the NHS provides free healthcare to everyone, regardless of age, employment status, and health.

Additionally, in Peru there is widespread corruption at the level of the national and regional governments, who keep money for themselves before distributing funds to hospitals, and doctoring financial accounts favourably. Corruption can seemingly also occur at the hospital level at MINSA if they find themselves with a patient who has no insurance; patients can be disallowed from leaving, and the hospital can benefit from them by receiving money from pharmaceutical companies in exchange for them performing clinical trials on those patients! This can be done without informed consent as patients can be led to believe they are receiving their usual regular medications. I must emphasise that this is only anecdotal information, from a Peruvian doctor who met a patient a patient who had been living in a hospital for four years, and happily so, despite experiencing medication side effects, since she had no money to pay for food or lodging.

In conclusion, although the NHS has experienced a struggle under precarious Conservative management, with all its financial difficulties and threats of privatisation, we can still be thankful and proud of our healthcare system, (currently!) free of discrimination, corruption and with unconditional, unwavering concern of our patients' safety, no matter what.

Do investigations and management plans differ compared with the UK? If so, why?

The answer to this question depends on which of the sectors you find yourself in. My elective was carried out in two EsSalud hospitals; Hospital Florencia de Mora, and Hospital de Alta Complejidad, both in Trujillo. A fellow Medical Elective student also went to a MINSA hospital and was able to relay to me her experiences from her time there.

Unfortunately the level of care is not the same in EsSalud and MINSA hospitals. During my time at the EsSalud hospitals, I saw plenty of comprehensive test results in patient notes along with scan reports. Doctors routinely examined patients on ward rounds, showed plenty of thought, and everything was as I had seen in the UK. On the other hand, the experience in the MINSA hospital, the emergency department specifically, was that important algorithms such as ABCDE was not used and the care given to patients was less organised. Whilst EsSalud hospitals were well-resourced, MINSA was less so, and for example, there were no monitors beside each bed in the emergency room, or privacy dividers or bedsheets.

A slight divergence from the topic (because I needed to find somewhere to add this!), is the management of staff illnesses. During my time on the wards, I spotted a nurse and a resident who were working with a face mask on, and cannulas in their hands. When I questioned the resident as to why she was cannulated and masked, the answer was that she had a fever and a sore throat that day, so was being given IV antibiotics! This boggled the mind, and I am still trying to decide whether that was a great, proactive approach to avoiding spread of infection, whether this was unnecessary antibiotic prescription, or whether these staff members should really have been taking the day off work!

I was able to experience medical care in a different setting when I attended two medical outreach campaigns in which tents were set up and many of us conducted consultations with as many patients as possible. This was to enable the more poor population, who have difficulty getting to a hospital due to living in far out villages, to access healthcare. The only things that were brought with us were a temperature probe, sphygmamometer, a batch of oral medication, and our stethoscopes. Blood pressure, temperature and physical examinations were the only things we could use to aid our diagnoses, and I found that my inexperience made this especially hard, and I often felt uncomfortable sending patients away without scans or blood test results that would have ruled out serious pathologies. Communicating with patients in Spanish was also an added difficulty, and that's before the fact that there was always music playing at volumes fit for a nightclub!

Reflection

I chose to carry out my elective in Peru, and with Medical Electives, as I had some knowledge of Spanish, but I wanted to further it and be able to incorporate this with medicine. Every day I had at least one hour of medical Spanish class in which I learnt how to take a history in Spanish, and practiced a lot through role-playing. I feel that this benefited me much more than just simply observing how the healthcare systems differed between the UK and Peru, as I am now able to bring a new skill to the team when I start working as an FY1. There is always going to be a delay before interpreters can attend to patients who cannot speak English, and if Spanish is their first language then even a few simple sentences to explain what is happening to them, will put them at ease. I know from experience of having deaf relatives in hospital, that even having just one doctor that can communicate with you in your language (in their case, British Sign Language) at a basic level makes a huge difference to one's experience as an inpatient, in what actually can be a scary place, even to English speakers, never mind those that don't understand the language around them.

I found the medical Spanish classes endlessly useful when it came to attending medical outreach campaigns, as it meant I didn't have to talk through an interpreter when asking my questions, thereby making the consultation more efficient. What the campaigns also reinforced to me, was how important it was to ask red flag questions. In each consultation we were armed only with a stethoscope and our ability to perform physical examinations, so we were unable to take samples, perform scans or even make referrals. Red flag questions were a great way to eliminate serious differentials, and put me at a bit more ease that we weren't missing anything that would necessitate specialist attention. Asking red flag questions is something that I have to keep telling myself never to forget to ask, as it will be what saves my back, as well as patients' lives.

My trip to South America was easily the best trip of my life. Not only was I able to immerse myself in South American living by staying with a homestay family, and experience what it was like being a medical student in completely different surroundings, but my confidence also grew more than I expected. Five years of medical school has taught me a lot of interpersonal and organisational skills, whereas in Peru I overcame my fear of speaking Spanish in public and making mistakes, so I came back to the UK feeling more self-assured, and I hope to carry that on to working life. Muchas gracias Perú!