

ELECTIVE (SSC5b) REPORT (1200 words)

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

Emergency Medicine (Urgencias), Cruz Verde Norte, Zapopan, Guadalajara, Mexico

There are 3 different types of service provision comprising the healthcare system in Mexico. The private sector is made up of insurance companies and private healthcare service providers. This form of healthcare is accessible to those who can afford it (currently around 5% of the population). The public sector offers coverage to part of the population engaged in formal employment through the Mexican Social Security Institute (IMSS); the Institute for Social Services and Security for Government Workers (ISSTE); Mexico's state-owned oil company, Petróleos Mexicanos (Pemex); the Ministry of Defense (Sedena); and the Ministry of the Navy (Semar).

For the rest of the population, who cannot afford private health insurance and are not employed by the public sector, there exists a public health service called Seguro Popular. Created in 2002 the Seguro Popular now caters for over 55 million people in Mexico (almost 50% of the country's current 127 million population). The Seguro Popular, financed by both the government and social security contributions from individuals, follows a similar model to our NHS.

The Cruz Verde hospital where I completed my 4-week Emergency Medicine elective serves Seguro Popular patients. Cruz Verde Norte is a relatively small hospital with 10 adult beds, 3 paediatric beds and 3 consulting rooms. There is also a similarly sized in-patient ward and an operating theatre, where procedures such as reductions of open fractures were carried out. Although the hospital was well staffed the level of treatment available was more basic than that provided by the NHS for patients in the UK. Patients also had to pay upfront for additional services and provisions such as medication and x-rays.

Presentations at Cruz Verde included minor injuries including such as sprains and fractures. However, I saw many more work related injuries and accidents in Urgencias than I have on EM placements in the UK, including falls from heights and lacerations to hands and fingers by mechanical machinery. This may be to do with the fact that many of these men were working in unregulated professions, and thus outside of formal health and safety regulations. Other common presentations to Urgencias were patients who had been bitten by dogs or stung by scorpions, the latter in particular something I had never been exposed to as a medical student on my placements in East London hospitals! I was surprised to see that most patients stung by scorpions only needed conservative management (fluids and observation for the main), and that it is actually quite uncommon to have a fatal reaction.

Injuries to victims of domestic violence were also common. One of the Doctors I worked with spoke of her frustration about the lack of support available to these women who, after they had been stitched up, simply went back home to their partners. I also saw a few patients who had overdosed, one of which was treated by gastric lavage with activated charcoal, an extremely unpleasant procedure.

Another common presentation to Urgencias were patients involved in car and motorcycle accidents, some of whom had suffered severe life threatening injuries (one in particular that sticks in my mind was a young man with an open book pelvic fracture whose scrotum was torn apart). Due to differences in resources (the hospital did not have a CT scanner, anaesthetists, blood for transfusion

or a surgical trauma team) the immediate care of major trauma patients before referral was very different to that which would be expected as standard in an NHS hospital.

In contrast to EM departments in the UK where a significant proportion of patients are elderly, I only saw a few 'geriatric' presentations during my four weeks in Urgencias, one of which was a fractured neck of femur. This fact reflects differences in UK and Mexican demographics. In Mexico only 10% of the population are over 60 (compared to in the UK) and average life expectancy is 76.

In terms of medication fluid and antibiotic regimens were similar to those used in the UK. One notable difference, however, was the use of analgesia and attitudes towards pain and pain management. I am not sure that I ever saw the use of opioid analgesia, even in major trauma situations. Often this came down to cost. Patients had to pay for their prescriptions, and if it were a choice between analgesia or antibiotics the doctors would advise the patient to opt for the antibiotics.

Urgencias at Cruz Verde only gave me a small glimpse into the complexities of healthcare in Mexico and its disease burdens. Like many countries obesity is a growing problem and the top 3 causes of death in Mexico are diabetes, coronary heart disease and stroke. However, the 4th commonest cause of death is interpersonal violence, a statistic reflecting drug trafficking activities and criminal activity and violence amongst the lowest socio-economic strata of Mexican society, a result of the country's stark economic polarisation and resulting inequalities in living standards and access to opportunities.

Although Mexico has its problems I had a wonderful time here on my elective. The staff at the hospital could not have been more friendly and welcoming, despite my fairly basic Spanish. As well as developing my examination and prescribing skills, I learnt a lot about wound care, and applying dressings, bandages and casts. I also had the opportunity to do a great deal of suturing, something I had not really done before. I even spent one afternoon at the home of the medical interns, an aspiring surgeon, practising suturing techniques with her on a pork leg! By the end of my placement I was well practised in setting up a sterile field, applying local anaesthetic and using surgical instruments.

Unfortunately my Spanish was not advanced enough to be able to take detailed histories from patients, but by the end of the 4 weeks I had picked up a lot of phrases and vocabulary that enabled me to function better as a member of the medical team and understand most of what was going on.

My usual shift pattern was either 8am to 2pm or 2pm until 8pm. During the half hour break we would sit outside in the sun and drink freshly made fruit juices bought from the stand right outside the hospital. I also did a couple of 'guardia' shifts, which are similar to our on-call shifts but last for 24 hours (and even sometimes 36)! Guardia shifts are staffed by 'internos' (similar to final year medical students), who have the responsibility of being the first person to receive with any emergency that comes through the door. A room with a bunk bed is provided, but on the shifts I completed we did not have chance to grab more than an hour's sleep between 4-5am. Although these shifts were incredibly tiring, it was here I saw the most interesting cases and had the chance to really get involved in patient care and treatment.

References

Valeria Valle and Clara Bellamy Ortiz, 'Mexican Immigrants Access to Healthcare on the US Mexican Border', *Voices of Mexico*, 100, 2015. Available online: <http://www.revistascisan.unam.mx/Voices/no100.php0>

WHO: Mexico (Country profiles). Available online: <http://www.who.int/gho/countries/mex.pdf?ua=1>