

ELECTIVE (SSC5a) REPORT (1200 words)

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

1) Describe common presentations in Emergency care in Mexico and compare it to presentations globally

There is a large overlap between the main presentations to the emergency department in Mexico and those in developed nations in other parts of the world. Some of the most frequently seen emergencies are Acute coronary syndrome, complicated lung infections, upper gastrointestinal bleeding, stroke, diabetic ketoacidosis and traumatic injury from falls and road traffic accidents. These are of course common presentations globally too, but especially in the developed nations of the 'western' world. Road traffic accidents occur at a higher rate than they do in other comparable nations in Mexico and account for a slightly larger proportion of ED presentations. This is partly attributable to high levels of motorcycle use. Mexico also has significantly higher rates of injury caused by violence than in comparably developed nations. For example it ranks 20th in the world for deaths due to human violence (2019). Levels of obesity and particularly diabetes, for which Mexico ranks 20th in the world (2019) are high. This means there is an especially high level of associated cardiac emergencies. A key difference I have noticed in my time here is that scorpion stings are very common in Mexican EDs and antidotes are on hand. It was a source of great amusement to the staff in the ED in Guadalajara when I suggested they must get a lot of patients with pancreatitis, since we learn in med school in the UK that scorpion stings can cause pancreatitis. I was met with looks of bemusement and further investigations revealed that it is a particular species of scorpion that can cause this, and not one native to Mexico! Hepatitis is also a big problem for Mexican EDs. I attended a lecture in the ED on hepatitis where I was surprised to see consumption of Herbalife - an over the counter health supplement - as an important risk factor. The very next day a man who had been abusing Herbalife supplements came in extremely unwell with hepatitis and very sadly passed away from his illness. Lastly, an important risk factor to look out for in shortness of breath presentations in Mexico is traditional cooking by burning wood. This tends to be a problem for women in rural areas. They can develop a COPD like illness similar to that found in smokers.

2) Describe how emergency care is delivered in Mexico and how this differs to care delivered in the UK

In Mexico there is a 3 tier system of health insurance. There is private insurance and self payers, who have access to specialist private hospitals, and even their own emergency services, with modern equipment meeting the same standards as UK services. There is then IMSS (Instituto mexicano del seguro social). This is the insurance the majority of the population have. It is funded by a combination of employers, the state and the individuals with the cover have to meet certain costs. Hospital general de Zapopan, where I was based, receives patients with this kind of insurance. A tally is kept of all of the equipment and medications used while a patient is in hospital and then there is a means-tested bill for the patient. Lastly there is a safety net insurance for those who are unemployed, very low income or do not meet the requirements for IMSS (for example some pre-existing conditions are excluded). This was known as Seguro Popular until it was very recently replaced by El INSABI which is 100% free for anyone born in Mexico. In this way Mexico does now share this similarity with the UK in that there is free universal emergency healthcare. It differs in that the level of care would not be equivalent to those under the social security insurance. Whereas everyone in the UK, in theory, receives the same standard of pre-hospital care. Another difference I noticed is that the care is a little less patient-centred. Often I noticed the doctors would go about their

work in the ED without acknowledging the patient or letting them know what they were doing. I don't intend to criticise this method I guess it's a function of culture, similar to the way things used to be in the UK. It's just interesting to see having had 'patient-centred' care drilled into me during 5 years of training in the UK. I should say this is something I noticed more in the ED than elsewhere in the hospital. But even in pre-arranged consultations there is a slightly more relaxed attitude with doors open and people popping in and out of the room. The patients don't seem to mind at all - I like it! In Mexico medical students do a year of unpaid internship work as 'internos'. I'd say they are a lot more hands on and involved in emergency patient care than the equivalent 5th year students in the UK. They are often the first point of care for patients outside of regular hours.

Emergency ambulance services are provided by the state (Cruz Verde, Fire Service) and the multinational NGO, Red Cross (or Cruz Roja as it is known here). There are also private ambulances. This is similar to the UK in that there are a variety of providers, including NGOs and private. But in the UK the private companies are usually contracted by the NHS. In Mexico you are more likely to find the private ambulances competing for patients and working with individual hospitals. Lastly, I thought there was a decent amount of equipment in the Emergency department in my hospital. The ECG machines were a little more cumbersome, using suction cups more liable to fall off than the stickers used at home. There seemed to be less generous use of analgesia too than you might get at home but patients weren't asking for it. All patients that needed it had their vitals monitored constantly on screens by their bed.

3) Compare Mexican Public (Mental) Health initiatives with those in the UK I think it's safe to say that mental health is not as far up on the list of priorities as it is in the UK. There is a real lack of public resources with as little as 0.13-1 public sector mental health workers per 10k population in regions in Jalisco, where I was working. It's more like 10:10k population in the UK. There are more services available privately in Mexico but the majority of those in need of the services are unable to afford them. Hence why as many as 75% of Mexicans with mental health disorders do not receive any treatment (2021). There are attempts underway to try and promote services and reduce stigma. Non-profits like Red Voz Pro Salud Mental run social media campaigns to increase awareness around mental health. Other non-profits like 'Yo quiero yo puedo' have carried out programs aimed to alleviate the stigma associated with seeking help for mental health problems. The public initiatives in Mexico tend to be focused more on some of the common problems mentioned in the first learning objective above. The government has implemented many policies to tackle the problem of obesity including a sugar tax. I have also noticed lots of posters around advertising help for victims of domestic violence.

4) Improve my Spanish and specifically improve it in the medical context. I think it has definitely improved overall. The Spanish I know is from learning on an app on my phone so I rarely actually conversed with anyone in Spanish until I got here. I made a good friend in Guadalajara on my second night after arriving here. She told me my Spanish was noticeably better now, than when we first met a few weeks ago so I'll take her word for it too! I can get by pretty well around town chatting with shop keepers, street vendors and waiters. The trouble is the medical context. A lot of doctors speak quite quickly and I think face masks in the hospital make it even more difficult to follow what is going on. I have noticed I can follow more easily and figure out a large portion of what is being said this week compared to last but I am with a new team - it could just be the change in personnel! In any case I am enjoying the challenge and I've loved Mexico so I will keep up my Spanish learning with the hope of returning - hopefully not in May though which is peak summer here.

Carmona-Huerta, J., Durand-Arias, S., Rodriguez, A., Guarner-Catalá, C., Cardona-Muller, D., Madrigal-de-León, E., & Alvarado, R. (2021). Community mental health care in Mexico: a regional perspective from a mid-income country. *International Journal of Mental Health Systems*, 15(1), 1-10.