ELECTIVE (SSC5b) REPORT (1200 words)

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

(A) Introduction

I organized the second half of my Medical Elective in Singapore, a South East Asian city-state. Singapore is ethnically and culturally diverse, with a large Chinese population (74.3%), followed by Malay (13.3%), Indian (9.1%), and others (3.2%) (1). Singapore also has a high population density (being the 3rd densest country in the world, at 7796 people/km2) (2); denser than city of London (5590 people/km2), where I pursued my medical education. Because of these reasons, I was curious to observe and understand the healthcare provision in such a dense and diverse South East Asian country.

(B) Public Health Issues in the ED

During my time in the ED, I observed a vast spectrum of emergency medical conditions – ranging from the bread-and-butter asthma exacerbation to the more serious complications of chronic conditions or treatment, such as neutropenic sepsis on a background of chemotherapy. Interestingly, there were almost no cases of violent trauma or drug-seeking. This was in stark comparison to East London, where these were more prevalent due to gang violence and substance abuse. The rate of a composite of violence and serious property crimes in Singapore was 218 cases in 2017 (3), compared to over 25000 cases of violent crime in London around the same time (4). This could be attributed to differences in prevalence of such social factors.

(C) Health system organization and delivery

(i) Economics

Healthcare coverage in Singapore is universal, operating under a co-payment (fixed amounts paid for the service) principle. Healthcare is never provided free of charge to the consumer, and the consumer typically pays a portion of the healthcare cost (3-10%). The remainder of the cost is accounted for by a compulsory savings plan to a medical savings account (Medisave), subsidies, and price controls.

This is in contrast to the public National Health Service (NHS) of the UK, which provides healthcare free of cost at the point of use, paid for by general taxation. While this reduces the financial burden on an individual patient, this system may encourage seeking medical care when it may not be necessary (e.g. common cold), resulting in diluted resources for more important medical cases, and increased inefficiency of provision. Further, funding for the NHS has resulted in it being in enormous and increasing financial deficit (5).

In principle, without co-payment, the public will consume more healthcare than they otherwise would if there was some financial burden to them. Indeed, in some health systems such as in the UK, waiting lists are utilized as healthcare rationing tools. Co-payment, such as in Singapore, can reduce the social cost of these waiting lists (6).

(ii) Pre-hospital Care

I also had the opportunity to observe the pre-hospital care provision. This is mediated by the Singapore Civil Defence Force (SCDF), which is a branch of the uniformed national service, and includes the ambulance service and fire department. Notably, this is different from the UK, where these two services are separate. The SCDF service is also unique as it includes conscripts from the 2-year long national service.

When responding to an emergency call, a significant challenge is one of geography. The dense urban environment with multi-storey buildings also creates a vertical challenge for emergency response services, where providers expend extra precious minutes to travel up to the 25th floor. A number of measures have been taken to overcome these challenges. Firstly, the government has funded Automatic Electronic Defibrillators (AEDs) in the lobby of every other housing complex, predicted to be achieved island-wide in 2019. Secondly, the public is encouraged to learn and perform bystander CPR. This is enabled by campaigns such as the DARE CPR/AED training course, smartphone apps, and bystander CPR is supported by dispatcher assist (where the emergency dispatcher instructs the bystander on emergency care). Thirdly, the introduction of the myResponder smartphone app alerts volunteer civilians to a nearby emergency (e.g. cardiac arrest), so that they can provide appropriate help until the SCDF arrives. Together, these measures by the SCDF in conjunction with civilians bridge an important gap in pre-hospital care.

(iii) Training as a Doctor in Singapore

I felt that the job of the junior doctors in this ED was similar to those in the UK. However, the level of consultant cover was superior in SGH. At any one time, there would be at least one consultant in every triage level, supported with adequate senior (registrar) cover. This was quite different from my experience in the ED in one of the UK hospitals, where, for a similar-sized ED, there would be only 1-2 consultants covering the whole ED. Notably, however, the number of patients was much more in SGH, which may have warranted more senior cover.

The working hours in SGH's ED were similar to those in the UK, with approximately similar sessions for teaching. I also noticed that there was a similar educational culture in SGH, where seniors would encourage more thorough case discussion/learning when opportunities arose, despite how busy the ED was. This may be a universal ED culture, which should be encouraged.

The training for ED doctors in Singapore is quite comprehensive, with formal rotations in General Medicine, Orthopedics, Pediatrics, and O&G, on top of core Emergency Medicine rotations. I thought that the breadth of this training will develop the trainee into a well-rounded EM physician.

(D) Reflection

In contrast to my medical elective in India, I was immediately immersed in a very high-level, efficient healthcare system. However, different challenges were faced in Singapore compared to the healthcare system in the UK. For one, the ethnic differences may create a barrier between practitioner and patient. I struggled to communicate with some of the patients who only spoke Mandarin. This emphasized the gap in my skillset, which I aim to sharpen to provide better care for my patients.

I was impressed at how hardworking the healthcare staff were in SGH, where the doctors and nurses would bend over backwards to provide the best level of care. This is said despite how crowded the ED was. SGH's ED was one of the busiest EDs I have ever seen. There were private cubicles for patients to be kept just long enough for assessment or procedures, before being transferred to a holding area for further management. This maintained patient throughput in the ED, as it became so crowded that patient trolley beds would be lying along the common walkways of the ED, while patients awaited treatment or assessment.

The emphasis given to prehospital emergency care was truly commendable as well. There was a lot of effort and money channeled into providing CPR/AED training to the public, with various programs, campaigns, and tools to encourage and aid civilian CPR. The noble goal of having at least 1 out of every 5 Singaporeans (approximating one individual per household) being able to administer CPR may be able to be achieved by such public measures. The responsibility of civilians for a national outcome is also reflected by the inclusion of the national service conscripts for the SCDF.

Overall, my experience of the ED in Singapore has been an enlightening one. With a balanced mix of public health, pre-hospital, and hospital care, I now have a better grasp on what makes Singapore's healthcare system.

(E) References

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