

ELECTIVE (SSC5a) REPORT (1200 words)

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

Describe the pattern of paediatric ophthalmic diseases in young children in Dubai's population and discuss this in the context of global health.

I have had the opportunity to learn much more about myopia prevalence and management here. Myopia is significantly more common in south Asian populations and so because there is a large south Asian workforce here in the UAE it was interesting to consider how this may be a contributing factor to the increased cases of myopia in Dubai. Moreover, seeing as high temperatures here can be a motivating factor for people to spend more time indoors than outdoors (especially in the summer months), this may also be a reason for high myopia rates here. There is the potential that increased screen time due to schooling adaptations in the COVID 19 era has also contributed to the increased time spent indoors as opposed to outdoors. Many parents seemed to raise the issue with the doctor during clinics that their children were spending 4 or more hours on an Ipad or other screen devices per school day for educational reasons - not to account for the extra time spent on screens for leisure outside of school hours! This specific reason may be a commonality with children across the world as nationwide lockdowns during the COVID 19 era triggered significant adaptations to primary and secondary education delivery.

It was wonderful to be able to use everything I had learnt during my global health iBSc at UCL to apply a global health lens to the presentation and management of paediatric ophthalmic diseases here. Dubai's healthcare provisions rely heavily upon the expat population, with a large number of British, American and European doctors as well as doctors from countries throughout the Arab world. I believe the diverse input has allowed for new systems in patient management to be put into place here or for systems to be adapted. I think it is also great that doctors from different countries are conducting medical research on the specific ophthalmic patterns here in the UAE as it allows unique insights into the specifics of the UAE as well as the commonalities and differences in patient management between countries. It also allows a reflection point on disparities in resource availability between different regions internationally.

How do ophthalmic healthcare provisions in Dubai compare with that of the UK?

I came to better appreciate the health security the NHS offers to all residents in the UK regardless of income bracket. However, it was reassuring to learn that all working residents in the UAE are provided with health insurance. I also learnt about how the coverage can vary depending on insurance provider. This was a big contrast to what I have seen in the NHS in the UK but it was fascinating to compare and contrast.

I saw how investigations are generally only covered by health insurance in Dubai if there is a clear indication for carrying it out. However, in the UK the NHS facilitates more of a system whereby diagnosis by exclusion is considered a safer and better way to manage patients with suspected diagnoses. Therefore, in patients whereby I may have expected a full investigative workup in the UK, the healthcare insurance system in the UAE could often mean that the pathway to a diagnosis was rather different.

I also saw how there is less access to members from other related specialities such as neurology and so it is crucial for the doctors here to have a network of doctors from other specialities in cases where patients sometimes need healthcare management from 2 specialities. It was interesting to learn about the ways in which foreign doctors in the UAE have adapted to this difference and learnt about new ways of working when different specialties may not be housed under the same roof as often is the case in the NHS.

Which paediatric ophthalmic pathologies are more common in Dubai and what are the risk factors for these?

It was very interesting to learn about the paediatric ophthalmic pathologies that are more common in this part of the world compared to the UK. I spoke with my supervisor about how moebian gland dysfunction was extremely common in the UAE compared to the UK. Contributing factors for this cause of dry eye could be the higher temperatures in Dubai as well as the frequent use of air-conditioning indoors. My supervisor also advised patients with dry eyes to eat a balanced diet as this was considered one of the main modifiable risk factors in moebian gland dysfunction. The fact that local produce is limited in Dubai compared to elsewhere in the world due to hot and dry weather conditions could explain the large reliance upon imported foods and this may be a contributing factor to some people adopting a more unhealthy diet due to increased levels of processed food.

Another interesting risk factor for ocular pathologies was hand sanitiser entering the eye accidentally and causing subsequent corneal erosion. My supervisor and I discussed how new problems are arising in paediatric ophthalmology so frequently due to the pandemic. It was a reminder of how no medical speciality is immune to being impacted by COVID-19 in some shape or form.

Consolidate and expand upon my ophthalmic knowledge from my 2 SSC's in Ophthalmology in year 5.

During my final year of medical school I organised 2 separate ophthalmology placements. One was based in paediatric ophthalmology at the Royal London Hospital and the other was based in the adult ophthalmology department at St Thomas' Hospital, London. The first of the placements was invaluable as it was my first exposure to paediatric ophthalmology and so I was able to see the key diagnostic tests, such as the cover/uncover tests, firsthand and spend time with the orthoptists as well. Doing a placement in paediatric ophthalmology in Dubai allowed me to consolidate the principles I had encountered back in the UK and see the similarities in diagnosing squints between 2 rather different locations. I also had the opportunity to see paediatric ophthalmic surgery for the first time, including the surgical management of squints as well as of glaucoma in a patient with Crouzon disease. This allowed me to conceptualise the ophthalmic presentation of Crouzon in a much more realistic way. Also, seeing a paediatric ophthalmologist with specialisation in strabismus collaborate with an ophthalmologist who specialises in glaucoma was an incredibly insightful experience as it allowed me to learn about the ophthalmic manifestations from two different perspectives.

I also had the opportunity to observe cataract surgery here in the UAE, with the surgeon explaining each of the steps of the procedure as she operated. This was much more detailed than the level of content I had revised for medical school exams and so allowed me to challenge myself. I also relished asking questions beyond the medical curriculum throughout the placement. Moreover, it was a rewarding experience to be probed with thought-provoking questions during the surgery on potential complications at each stage.