ELECTIVE (SSC5c) REPORT (1200 words)

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

1. What are the prevalent paediatric conditions requiring hospital admission in Newham and how might this differ worldwide?

During my time at Newham, I have encountered a variety of clinical cases requiring hospital admission ranging from simple diseases such as wheeze typical of asthma, to more complex conditions such as addisonian crisis secondary to congenital adrenal hyperplasia. The common presentation of asthmatic complications at Newham differs from the level of presentation worldwide, which brings the debate of the hygiene hypothesis into discussion. Although this argument now brings much disregard, it is nevertheless still quite interesting to note. There is very little reported data on the burden of asthma on health services in low income countries. Data from European countries shows Italy has low rates of hospital admission secondary to acute asthma (25 per 100, 000) as compared to higher rates in countries such as Lithuania with a 10 fold increase (250 per 100, 000). The UK rates are a median score of 100 per 100,000. In the US, common paediatric conditions requiring hospital admission similarly include respiratory problems and infections, asthma being the most common reason amongst those aged 6-12 years. In older children of the US, common reasons for hospital admission include injuries.

In the developing world, many of the paediatric hospital admissions are gastrointestinal related conditions including diarrhoea, fever and malnourishment. The majority of these gastrointestinal complaints are of infectious origin. Similar presenting complaints presenting to Newham, can much of the time be attributable to non infectious causes including inflammatory bowel disease.

2. How are paediatric health services delivered and managed in the UK, compared to the less developed world?

During my time at Newham, I have noted some of the more commonly prescribed medications on the paediatric ward, including fluid therapy, analgesia and antibiotics. These are not particularly complex or sophisticated drugs however they are life saving drugs in a number of cases. The simplicity of these drugs resonates throughout the less developed world, where they too resolve many paediatric conditions with these simple measures.

All around the world, there is no escaping the fact that resources are finite and must be distributed accordingly. National health in the UK determines the division of resources on a needs basis, and offers access to emergency services to all. This is slightly less clear in the less developed world, whereby the neediest are not always the priority in healthcare, much of the time because they simply cannot afford healthcare in countries which require payment for treatment.

UK healthcare is supplied by the NHS, a system quite unique from those in less developed countries. All health services in the NHS are free for children and this includes GP appointments, specialist referrals, secondary care, prescriptions and immunisations. Healthcare in the UK is easily accessible as compared to healthcare in the less developed world. In the UK, access to secondary paediatric care is facilitated by a child's general practitioner who refers the patient to a specialist paediatrician if it is deemed appropriate. Delivery of health services in the UK is largely multi disciplinary with one of the

most important members of that team being the patient's parents. UK parents are heavily involved in the decision making towards a plan of management for their child.

The focus of paediatric healthcare in less developed countries is greatly targeted towards the prevention or treatment of serious infection and malnourishment. This is also mirrored in the UK with the use of vaccinations and nutritional advice, however perhaps on a less necessitating scale. UK children are expected to meet targets of height and weight that children in less developing countries would not even come close to. Failure to achieve an adequate height or weight is often outweighed by the necessity of eliminating the complications of malnourishment.

3. What examples of good medical care has been observed and why has this made a difference to the condition of a child?

I have witnessed the immense benefits of fluid therapy during my time at Newham. One particular case I remember is that of an 8 year old girl with suspected inflammatory bowel disease. She had been discharged from hospital after a period of fluid therapy, only to return a few days later with 1 kg weight loss due to the inability to maintain a good fluid balance whilst at home. Upon readmission, she was treated with fluid therapy again and improved very quickly. This reminded me of being aware of simple measures that can make a patient more comfortable.

Another example of good medical care, which is particularly important in paediatrics, has been that of good observational skills. A 4 year old boy attended A&E after suffering a minor head injury. He was well and his subsequent CT scan was unremarkable. However, staff noticed he appeared mildly drowsy, a reportedly difficult sign to differentiate in children who may simply be tired. To monitor for the signs of possible raised intracranial pressure, the child was admitted for overnight observation. He was discharged the following morning after repeated observations were encouraging, and his parents were safety netted with relevant information regarding head injuries. This short admittance benefited the parents as well as the child. It allowed the parents to rest assured that the delivery of immediate treatment for any complications of the head injury were available if necessary.

4. To become more confident in managing paediatric conditions whilst improving my clinical examination technique and diagnostic reasoning.

The teaching based at Newham has been excellent, thorough and targeted at an appropriate level. I have acquired an immense amount of clinical knowledge purely through classroom based learning which I have had numerous opportunities to deliver on the ward. I have more confidence in adopting a logical route of thought when approaching paediatric presentations and can successfully offer suggestions for differential diagnoses, investigations and approaches to management. In particular, I have found my knowledge of paediatric cardiology to have greatly improved. A key aspect of my learning that I am sure to remember is the importance of age in diagnosing paediatric conditions. Age aids in refining the possible differential diagnoses one might consider thus allowing a quicker resolution to common paediatric presentations. I have learnt that different paediatric conditions can have quite similar initial presentations and the subtleties of differentiating between the possible diagnoses lies in the age of the patient.

On previous encounters of paediatric admissions, I had found it difficult to engage the child in the examination and therefore found myself rushing the procedure to end an uneasy situation. However, during this elective, I have acquired small skills that have made all the difference in performing my

examinations in paediatrics, e.g. approaching the child with conversation of anything other than the examination to begin with, building rapport, adapting the examination to a game-like routine. The challenging task of examining an unwell child now seems much less daunting and much more approachable.