

ELECTIVE (SSC5b) 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 common acute respiratory illnesses affecting the local population in comparison to other well developed nations (eg Canada) and lesser developed nations

Respiratory complaints are common in the developed world. In the Netherlands one quarter of paediatric primary care consultations are for a respiratory symptom. A common respiratory condition is acute bronchiolitis caused by the respiratory syncytial virus (RSV). Prevalence studies have shown up to 50% of children are infected with RSV by their first birthday and almost 100% are infected by their second birthdays. In the Netherlands, in the first year of life the hospitalisation rate for acute bronchiolitis is reported to be between 1-2% of all infants and as high as 10-15% for at risk children.

In the UK the admission rate for acute bronchiolitis and acute bronchitis in children less than 1 year was >2900 per 100,000 children in 2011. Comparatively admission rates are significantly higher in eastern Europe and in the Baltic region with Latvia (~4000 in 100,000), Lithuania (>4800 in 100,000) and Slovakia (>7000 in 100,000) having significantly higher admission rates than the UK.

Severe community acquired pneumonia (CAP) is common among children all over the world. In the developed world there are ~4 million new episodes of CAP in children <5 years old every year (an incidence of 0.05 per child-year) whereas in the developing world there is an estimated 151 million new episodes each year (an incidence of 0.29 per child-year).

The overall mortality rate is low in the developing world, with CAP only being an important condition in patients with severe underlying chronic disease. In the developed world however the mortality rate is as high as 1.2-2.6% or >2 million every year.

Within Europe the mortality rate varies widely. In western European countries such as the UK (0.6 per 100,000), France (0.16 per 100,000), Spain (0.2 per 100,000) and Germany (0.14 per 100,000) the mortality rate for children under the age of 15 in 2011 was very low. In comparison in eastern European countries such as Romania (24.01 per 100,000), Bulgaria (11.22 per 100,000) and Russia (4.14 per 100,000) mortality rates are significantly higher.

References

European Respiratory Society, The European Lung White Book. (2011)

World Health Organisation, Hospital Morbidity Database, October 2011 update.

Describe the escalation of care available to patients in the local area compared to other well developed nations (eg Canada) and lesser developed nations.

Levels of care available in the UK and Canada are identical. Both healthcare systems are well funded and have a layered approach to healthcare. The lowest level of care is primary care. In the UK this level is performed by a general practitioner responsible for caring for the whole family. In Canada primary care is undertaken by a Family Doctor, a doctor responsible for the adults in the family. There is also a community paediatrician who is responsible for the children in the family. This differs from

the UK where paediatrics is a secondary care speciality. The next levels of health care in the UK and Canada is secondary and tertiary care. These are the same in both countries and comprise of specialists care. Both secondary and tertiary centres provide intensive care in the UK and Canada.

In lesser developed countries the access to health care is not as widespread and have many more layers to their healthcare. For example in Kenya the lowest level of care is provided by dispensaries, which are run by nurses and are designed to treat simple ailments such as the common cold and flu. The next level up is the health centre which has at least one doctor. The health centre's aim is mainly preventative medicine rather than curative focusing mainly on childhood vaccinations. A health centre does not come equipped with theatres. The next level up is the sub-district hospital which is similar to the health centre but is managed mainly by doctors and has theatres capable of basic procedures such as caesarian sections. Next is the district hospitals which are the referral point for sub-district hospitals, these usually have the resources to provide comprehensive medical and surgical services. The next level up is the county hospitals. Kenya has 47 counties each served by a county hospital which is the referral point for district hospitals. District hospitals are well funded with access to specialist care and intensive care.

The above description of the healthcare system in Kenya shows a potentially lengthy referral route for an unwell. Only when reaching near the top tier of care in Kenya is intensive care support available making Kenya's ceiling of care equivalent to the UK and Canada's average secondary care.

Describe a public health initiative in place within the local area aiming to combat respiratory illness in local patients.

Influenza vaccinations are available during the months of September and November and is provided to pregnant women, children with an underlying health condition and anyone over the ages of 65. A nasal spray version of the annual vaccine is now also offered to healthy children two, three and four. Children in primary school years one and two are also offered the vaccine annually.

Other vaccinations are also greatly emphasised.

Gain further confidence in managing paediatric patients for my upcoming role as a junior doctor.

I have reaffirmed my knowledge and skill of taking a paediatric history, examining a paediatric patient and also treating a paediatric patient whilst on this placement.

I placed special emphasis on spotting a sick child and the differences between the early signs that a sick child displays in comparison to that of an unwell adult. I have also learnt to be ultra cautious in regards to treating paediatric patients.