

## **Elective Report**

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Elective Dates: 16/04/12 - 18/05/12

Elective Supervisor: Dr Eduardo R. Lentini

Elective Department: Respiratory Medicine, Hospital Humberto Notti, Mendoza,

Argentina

## **Objectives**

## Medical School Objectives

- Describe the pattern of disease/illness of interest in the population with which you have worked and discuss this in the context of global health
- Describe the pattern of health provision in relation to the country in which you have worked and contrast this with other countries, or with the UK.

## Personal Objectives

- What were the most prevalent diseases and radiological investigations encountered in Mendoza, Argentina? How do they differ in the UK?
- How is general healthcare delivered in secondary services and how does the organisational structure of healthcare differ from the UK?
- How do health beliefs in Argentina affect healthcare? How does this compare to the various cultures in the UK?
- To practice clinical skills and teamwork in a new environment whilst immersing myself in the local culture and environment.

Argentina is over eleven times the size of the United Kingdom, making it the 8<sup>th</sup> largest country in the World and consists of 23 provinces. The Mendoza province contains a population of approximately 1.7million, a 5<sup>th</sup> of Argentina. This province contains the highest peak outside the Himalayas and main exports include olive oil and wine.

In the UK the National Health Service provides healthcare to all permanent residents, is free to use and paid for through general taxation. In addition private health care and a wide variety of alternative therapies are available for those who pay. The Argentinian health care system is composed of three sectors;

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public, private and social security. The public sector provides healthcare for a large majority of the population. This sector is funded and managed by "Obras Sociales", a group of umbrella organisations for Argentinian workers unions. Over 300 Obras Sociales exist providing healthcare for over 8million Argentinians and are organised according to the beneficiaries' occupation. However only workers employed within formal sectors are covered by this insurance scheme. As a result healthcare is influenced by occupational status. After the economic crisis in 2001, the number of individuals covered by this scheme fell as unemployment rates increased.

Several hospitals are located in and around Mendoza city. The government-funded Hospital Humberto Notti is one of the main facilities for paediatric healthcare in Mendoza, serving patients from the general working-class public without medical insurance. The hospital was renamed in 1992 after Dr. Humberto J. Notti, a Paeditrician famous for writing an autobiography called 'Pasé por este Mundo'. As a tertiary referral hospital consisting of 206 doctors and 220 beds, a wide range of rare and critical conditions are treated. Patients are referred from all over central and western Argentina, aged between neonates and 14 years old. As a public hospital a downside is that it is often affected by a lack of funding and protests are commonly staged by doctors and nurses over pay disputes.

The respiratory service is led by chief paediatric pulmonologist Dr Eduardo R Lentini. This service is unique and led a program specific to Cystic Fibrosis (CF) and oxygen therapy. Time spend within the department was split between clinics and in-patient services. Conditions observed included AV malformations, hemosiderosis, lymphoma and exacerbations of chronic respiratory disease. Clinic hours were more focused, with days dedicated to Bronchopulmonary Dysplasia, Asthma and CF. Some services provided by the department included bronchoscopy, barium swallow and spirometry. The most common radiological investigations observed were similar to the UK being standard chest radiography and CT. The main difference being, imaging was delivered via film rather than computer images.

As a service dedicated to providing specialist care for CF most patients encountered presented with this condition. It is estimated that 1 in every 2,500 babies are born in the UK with CF. As a result babies are screened for the condition as part of the NHS newborn screening programme. In 1994 detection for CF was added to national screening programme in Argentina. In the UK the average age of diagnosis is 5 months and estimated survival for a child born now

is 40-50 years. Management of CF in the UK is generally co-ordinated by specialist tertiary centres.

In 1989 Dr Eduardo R Lentini and his team developed the sole Cystic Fibrosis Centre in Western Argentina (Mendoza). This team consists of 4 pulmonologists and 3 pulmonary fellows. Through state funding by the Cystic Fibrosis Centre, adopting a multidisciplinary approach and adhering to guideline orientated treatment; survival rates have increased drastically. Between 1985-2008 median age of CF patients has increased from 4 to 12 years. In addition between 1999-2008, 17-year survival has increased from 45% to 80%. These statistics highlight the impact of implementing focused specialist centre care and guideline based management in reducing differences in CF management between the developed and developing world. However Dr Eduardo R Lentini states the increased survival has presented a new challenge regarding transfer of older patients to adult facilities.

Within the context of global health this example gives evidence towards the positive impact of focused guideline based approach to care despite limited resources.

Catholism is the main religion practiced in Mendoza. Although health beliefs can be heavily influenced by religion, patients seemed to understand the genetic nature of CF and its management. Like any country health beliefs are varied however Dr Lentini stated he rarely encountered any peculiar beliefs. The UK is more multicultural, especially in major cities. This would suggest the existence of a greater variety of health beliefs. In future I will ensure that these factors are taken into account when interacting with patients.

During my time with the respiratory team I practiced important core skills. These included respiratory auscultation and drug dose calculations. With the wide range of conditions seen in the department I was able to practise recognising several clinical signs.

Outside of the hospital I enjoyed the local culture and city of Mendoza. It was rare to see an obese individual and it appeared most people kept in shape. Walking through the city and parks exhibited numerous ways the local population could exercise. These included tango classes, martial arts clubs and gymnasiums. It was interesting to see basic gym equipment installed in open parks and I was pleased to read this method to encourage exercise is being trialled in the UK.