GENERAL MEDICINE

SSC 5c ELECTIVE ASSESSMENT REPORT

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Elective location: Thalassery, Kerala.

Elective dates: 05/05/2013- 08/06/2013

Objectives:

1) **How is the healthcare system in Kerala organised?**
2) **What are the common conditions in the general population in Kerala (Thalassery)?**
3) **Improve clinical knowledge, build on clinical skills and gain further understanding of the management of common conditions**
4) **What effect do social and cultural factors have on healthcare in this specific part of Kerala**

How is the Healthcare system in Kerala organised?

Thalassery is a town in the state of Kerala, South India. It is an important town on the Malabar Coast of northern Kerala with a population of approximately 100, 000 people. It is one of the most literate states with the average literacy rate being 86 % (1)

Kerala has been praised for its health achievements since the 1970s despite its economic state. This paradox is referred to as the "Kerala model of development". The achievements are said to be based on the good performance of its health sector as well as non health sector.

Health indicators of Kerala:

Infant mortality rate (per 1000 live births)	15.6
Crude Birth rate (per 1000 population)	18.2
Crude death rate (per 1000 population)	6.4
Life expectance at birth: male	68.2
Life expectance at birth: female	73.6

(2)

The reason Kerala's healthcare system is effective is mainly due to contributions such as widespread education and public health projects targeting malaria, leprosy, infections, mental health and

immunisation coverage of children between 12 and 24 months (nclude diphtheria/pertussis/tetanus, the oral polio vaccine, measles and BCG)

Despite such contributions Thalassery as well as Kerala as a whole is facing new challenges, including:

- An increase in accidents and injuries
- Return of infectious diseases especially malaria, dengue, chickungunia and HIV/AIDS
- An ageing population
- Diseases due to pesticides and other industrial chemicals

In Kerala, the healthcare system is organised into primary, secondary and tertiary healthcare. The primary healthcare focuses on disease prevention including: immunisations, public health education and in particular the prevention of communicable diseases e.g. chickungunia, swine flu, water borne diseases .
Secondary healthcare focuses on disease detection and treatment and tertiary healthcare includes specialist care.

The healthcare facilities can be divided into three categories in view of service of care: Allopathy, Homeopathy and Ayurvedic medicine;

Allopathy, Homeopathy and Ayurvedic medicine are accessible via public, private and cooperative sectors, however, allopathy in addition has primary as well as community health care centres.

The private sector plays a very significant role in the Kerala health care system. One interesting observation we made is that a sizeable percentage of the population approach the private health care sector for treatment.

Below is an outline of the infrastructure of the hospitals in the healthcare system in Kerala.

MEDICAL COLLEGE HOSPITAL

- specialised hospitals offering all services including specialist care

DISTRICT HOSPITAL

TALUK HOSPITAL

- These hospitals are controlled by the state government and serve a smaller specific area.

COMMUNITY HEALTH CENTRES

- Run by doctors, healthcare inspectors and supervisors (male and female).
- Focus on field work and national health programmes.

PRIMARY HEALTHCARE CENTRES

- They provide free curative medicalcare including preventative measures – lifestyle change programmes, immunisation, field work and education.

SUBCENTRES

- Focus on family welfare

Comparing the healthcare system in Kerala to the British National Healthcare system, I found that there were advantages and disadvantages to both. One striking advantage of the existing healthcare system in Kerala is the availability of alternative medicine and the direct access to private and specialist healthcare. The major disadvantages of the NHS are the long waiting times and the lack of direct access to specialist care. From what I observed, however, the care provided by the NHS is more thorough. It was also evident the issues regarding sanitation and hygiene in UK hospitals are far more advanced compared to the hospitals in Kerala.

What are the common conditions in the general population in Kerala (Thalassery)? + Improve clinical knowledge, build on clinical skills and gain further understanding of the management of common conditions

During our experience at tely medical hospital we had the opportunity to visit many of the departments including: rehabilitation medicine, general medicine, general surgery, paediatrics and obstetrics and gynaecology. In addition we were given the opportunity to practice our clinical examination skills and handle the challenge of communicating with patients despite the language barrier.

During the first week we were introduced to the consultant physiatrist who was in charge of the rehabilitation department at the hospital. We sat in during the consultation and were able to examine patients who presented with rheumatological conditions.

I noted that the following rheumatological conditions were common in Thalassery: rheumatoid arthritis, osteoarthritis, mechanical back pain and nerve injuries. These are very similar to the common rheumatological conditions in the UK. However, I noted that the management of such conditions differed at tely medical centre, in addition to drug therapy involved the use of physical modalities such as ultrasound waves, paraffin wax and ultra-red light therapy. Such physical modalities are not used as treatment by the NHS.

The surgical outpatients' clinic according to my observation was the most busy clinic. I found it surprising that the surgeon would assess on average 60-80 patients a day. We were fortunate enough to see a wide range of surgical conditions in addition to some rare cases that we would not have been able to see in the UK. Common surgical conditions were: abdominal pain, incisional hernias, haemorrhoids and inflammatory bowel disease as well as breast lumps. These surgical conditions are also very common in the UK, however it was interesting to see that the general surgeon here saw a wide range of conditions ranging from gastroenterology to breast pathologies.

Following a few sessions in the dermatology clinic we found that the common conditions included atopic dermatitis and fungal infections such as tinea corporis. I was able to observe a cryotherapy clinic and was given the opportunity to use the apparatus myself on a few patients. I found this a very valuable experience.

During our shadowing period of the general medical department we had been on ward rounds with the consultant physician. Common conditions that patients presented with included coronary artery disease, non communicable conditions and respiratory conditions such as COPD and asthma. The required investigations and management of such medical conditions did not differ from those carried out by the National Health system in the UK. Due to the exposure to the variety of signs and symptoms, we were able to build on our clinical examination skills and diagnostic skills. We were also able to observe the difference in examination techniques.

Furthermore, common cases in Kerala we were not able to witness but came to know about include organophosphorous compound poisoning. Cases of poisoning due to organophosphorous compounds are on an increase in Kerala but also India as a whole. Organophosphorous compounds interfere with the mechanism of transmission of nerve impulses. The effects of poisoning are headaches, dizziness, restlessness, cold sweats, unconsciousness and in extreme cases ataxia and respiratory paralysis. The management of this condition involves the administration of intramuscular atropine in addition to education on the safe use of pesticides as well as the possible adverse effects. I found this particularly interesting as such conditions are rare in the UK.

In summary we found that common conditions in this part of Kerala can be divided into two categories: communicable and non communicable diseases. Communicable diseases such as Dengue fever, malaria, Leptospirosis, Hepatitis, chickungunia and H1N1 fever are at an increase due to migrant labourers and a lack of safe drinking water. We also found that the occurrence of an infection/ communicable disease in a patient with comorbidities is a major problem as it leads to increased mortality. However, having visited Primary and community health care centres we were able to observe the implementation of preventative measures e.g. immunisation, education, field visits and increasing public awareness. Non communicable diseases include those due to modernisation, urbanisation and prosperity. These include metabolic diseases e.g. heart disease, hypertension, obesity, diabetes and hypercholesterolaemia.

What affect do social and cultural factors have on healthcare in this specific part of Kerala?

The most important social factor that affects healthcare is wealth. The best healthcare available in Kerala is provided by the private sector, however only 50% of the population get access to private healthcare due to poverty. The remainder of the population opt for treatment from government hospitals which provide free and effective healthcare, however due to the limited funding and resources, it is of less comfort.

References:

1) Thalassery, http://www.thalassery.info/history.htm [accessed on 19/05/2013]

2) Koji Nabae et al, The Healthcare system in Kerala- its past accomplishments and new challenges, Department of public health, Toho university, Journal of National institute of Public health, 52(2): 2003, June 27th 2003.