

# **Keran Vijayarajan – Belize Elective Report**

**Dates of elective: 17/04/14 – 29/05/14**

**Elective supervisor: Dr Guillermo Rivas**

**Hospital: San Ignacio community Hospital, Belize**

**Specialty: Obstetrics and Gynaecology**

**Elective Objectives (in bold):**

**To observe the common obstetric complications in Belize, in comparison with the UK**

**To observe the differences in treatment and patient interaction between Belize and the UK.**

The hospital that I undertook my placement in was San Ignacio Community Hospital, located in San Ignacio, Belize. It is what is known as a “level 1” hospital, in which this is the lowest step in a hierarchical system, as women are treated here for most of the problems they encounter in their pregnancy that do not need invasive intervention. Therefore the cases we saw did not warrant urgent medical attention. If significant intervention is needed, these patients are then subsequently referred to a “level 2” hospital in Belmopan, or a “level 3” hospital in Belize City.

The first thing that struck me about the hospital, was the lack of doctors working here. In the UK, I am used to seeing a team of approximately about 5 doctors, including a consultant, a registrar, SHO’s and foundation year doctors covering a ward. However, here there were approximately 6 doctors, covering the hospital, and although doctor-patient interaction was good, the doctors ultimately reserved their attention for the patients that needed it the most, which, to be fair, is like the UK.

In regards to the obstetric complications that we saw, the most common theme that we encountered was that of teenage pregnancies and unplanned pregnancies. There were various health promotion posters located around the hospital for breast feeding, barrier contraception and HIV testing. Belize was noted to have one of the highest rates of HIV per 100, 000 in its population in the world. There were promotion posters in and around towns, as well as the hospitals to highlight HIV awareness and promotion.

It seemed as if sex education was not taught as effectively in Belize, as it is in the UK, and that some of the patients did not understand the severe consequences of HIV. There did not appear to be a specialist unit in the hospital for HIV patients to learn more about the condition, but this could be due to the fact that it is a “level 1” hospital.

The most common obstetric complication that we saw was that of Eclampsia, and in 2005, it was responsible for 60 % of maternal mortality. Although it is treated the same in the UK

## Elective Assessment

### Objectives:

- 1. What are the prevalent cardiovascular problems seen in a typical Indian hospital? How does this compare to the UK?**
- 2. How are medical services, especially cardiac services, organized at CMC Hospital? How does this compare to a typical NHS hospital? Consider healthcare funding.**
- 3. Compare management delivery of cardiovascular services at an Indian Hospital and compare to a typical NHS Hospital.**
- 4. What have I learnt about management of common cardiovascular problems? Has my perspective in the specialty evolved? What are my thoughts as to a future in this specialty?**

The total Indian population in 2012 according to WHO was 1,240,000,000. Life expectancy at birth for females was 68, and for males it was 64 years old. This is comparable to the UK which had a total population of 62,783,000 and life expectancy at birth for females was 79 and 83 years old for males. On the Cardiology Ward I was surprised by the amount of patients who were in their early thirties and had already had a serious Myocardial Infarction. This is rare in the UK unless they have an underlying genetic condition. The most prevalent Cardiovascular problems seen at the CMC, Ludhiana Hospital are Coronary Artery Disease, Dilated Cardiomyopathy secondary to Ischemia, and Rheumatic Valve Disease. Tuberculosis is extremely prevalent in India and is an important differential diagnosis in a patient presenting with pericardial effusion as it's possibly due to Tuberculosis Pericarditis. In the UK however, this diagnosis would not be very high on the differential. Interestingly, as the life expectancy is increasing slowly in India, the Cardiologists are seeing a slight increase in the amount of Aortic Sclerosis due to calcification of the valve, which is extremely prevalent in the UK in our ageing population. The prevalent Cardiovascular problems seen in the UK are fairly similar but probably Heart Failure (acute and chronic), Ischemic Heart Disease and Arrhythmias are the main conditions. The main Cardiovascular risk factors in India were mainly Diabetes, Hypertension and Diet. The UK obviously share the same risk factors that were just listed, along with smoking.

Another interesting cardiovascular condition that is prevalent in India is a condition referred to as Coronary Artery Ectasia (CAE). Before my placement I had never heard of this term but it is very common amongst the Indian population. CAE represents a form of atherosclerotic coronary artery disease, seen in some patients undergoing coronary angiography. The presence of ectatic segments look like dilated areas along the coronary arteries causing sluggish blood flow and can promote exercise-induced angina, thrombus formation and myocardial infarction, regardless of the severity of stenotic lesions. The management of CAE involves lifelong anti-platelet drugs. I found this subject extremely interesting and it has prompted me to do further reading around this subject. In the UK CAE is rarely seen on patients undergoing coronary angiography, but mainly atherosclerotic coronary artery disease causing stenotic lesions is evident during angiography.

In regards to the delivery of management in CMC Ludhiana, it was very similar to the UK. I specifically looked at the ST Segment Elevation Myocardial Infarction (STEMI) protocol. The main pathway of patients presenting in casualty with a STEMI was similar to the UK: the on-call

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