Elective Report

Angkor Hospital for Children, Siem Reap, Cambodia

I spent the second part of my Cambodia elective at the Angkor Hospital for Children (AHC) in Siem Reap. It is a non-governmental organisation (NGO) paediatric teaching hospital set up by a charity known as "Friends without a Border" (1) and it provides free healthcare to Cambodian children under the age of 16.

Most tourists pass through Siem Reap while visiting the famous Angkor Wat temples but remain largely sheltered from the impoverished life that many of the local people live. Despite increasing tourism associated with the temples and its main city, Siem Reap is the third poorest out of 24 provinces in Cambodia. Sadly almost half of the women are completely illiterate, half the children are moderately malnourished and a fifth are severely malnourished. Most of the families live in rural areas (85%) and a third of them survive on less than $1/day. Two thirds of the population has access to safe water however less than a third have adequate sanitation (2). The demographic in Cambodia is also very different with up to 50% of the population under the age of 16 which further highlights the need for quality paediatric healthcare. Improvements in the population's health are occurring as the country recovers from the devastating genocide carried out by the Khmer Rouge in the 1970's in which all but 30 of the nation's doctors were killed. For example – in 2006, 1 in 11 (90/1000) children died before their fifth birthday compared to 1 in 7 (135 per 1000 live births) in 2002. (2). Most of these deaths are due to preventable causes and pleasingly preventative health is a major focus of AHC. Examples of how AHCpractices preventative health are its vaccination programs and its extensive hospital and community based education.

While I was placed at AHC I had exposure to many different areas of the hospital and I was free to choose how much time I spent in each area. I spent most of my time in the main inpatient area(Figure 1) shadowing the paediatric residents and doing independent patient examinations and reading the medical notes. Ward rounds are conducted in English, albeit a little difficult to understand, and the consultant on the round often uses this time as an opportunity to teach common important topics. For instance, I received interesting tutorials on malnutrition, respiratory distress, shock and abdominal distension to name a few. There is also a daily teaching ward round in the intensive care department and I often attended this to gain experience in how the sickest patients are managed. In contrast, the outpatient department is worthwhile visiting to brush up on the basics as it sees a high volume of patients that typically have relatively mild conditions (see Figure 2). The radiologist at AHC is a particularly good teacher and spending time with him is useful for improving your skills in

ultrasound and X-ray interpretation. I didn't spend any time in theatre or the laboratory but they are apparently very welcoming to students.

Figure 1 – Inpatient department at AHC

Figure 2 – Crowd of people waiting to be seen in the outpatient department

The student's role at AHC is primarily observational. It is not a suitable placement if you would like to do lots of procedures but it provides many other excellent educational experiences. It is an opportunity to see medical conditions such as measles, kwashiorkor and tuberculosis – all of which you are far less likely to encounter in Australia. Approximately one fifth of the patients on the inpatient wardhad severe malnutrition as their primary reason for admission. The most common problems were pneumonia, bronchiolitis and gastroenteritis and it was interesting to compare and contrast AHC's treatment programs with Australia. For example, there was a much lower threshold for using strong antibiotics such as ceftriaxone in the initial stages of pneumonia treatment which reflects not only a difference in causative organisms but also the fact that the children often presented late with advanced and severe disease. Another interesting medical difference is the way in which continuous positive airways pressure (CPAP) ventilation is provided – instead of the expensive machines we use in Australia, they simply place one of the tubes in a bottle of water to provide a closed positive pressure circuit (see Figure 3).

Besides learning about the medical differences my other main objective was to learn about the cultural differences between Cambodia and Australia. I found that spending my entire Elective in Cambodia optimised my understanding of the local culture because a lot of it is learnt not just at the hospital but also through day to day living in the country as well as the inevitable weekend activities. Examples include visiting the ancient temples, cultural dance shows and dinner with the local staff. Obviously it helps to try and learn the Khmer language as well and with assistance from the free classes provided by the hospital I was stumbling my way through sentences such as "My name is Andrew, a student from Australia – is it ok if I examine your child?" and "Where is the pain?". The local medical staff (Figure 4) encouraged me to keep learning Khmer and they were very friendly and approachable. I had many interesting discussions with them during coffee breaks and I exchanged contact details with the few that I got to know quite well.

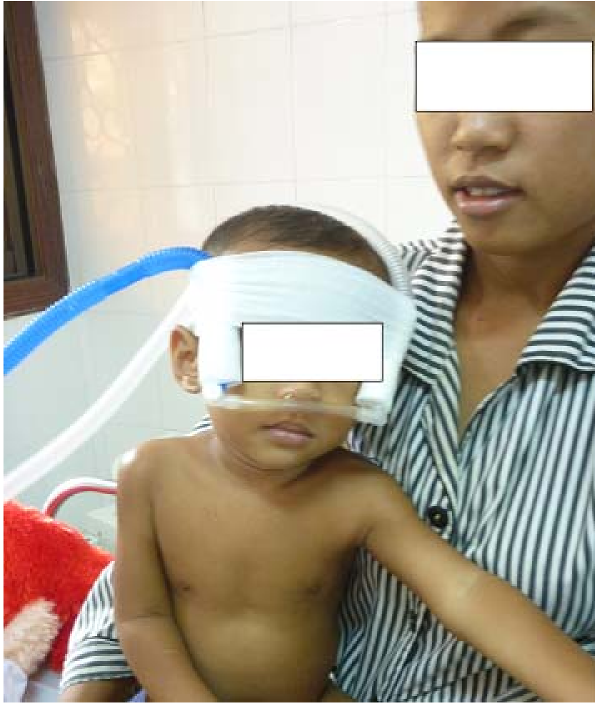

Figure 3 – Cheap CPAP - White tube is connected to oxygen tank with humidifier, Blue tube is connected to bottle of water with specific level of pressure. Picture reproduced with consent

Figure 4 – The local medical staff at AHC

A particular concern I had whilst at AHC was the large number of drug interactions I saw that required admission to hospital. There is a lack of regulation surrounding medication availability in Cambodia which means that anyone is able to buy almost any drug from almost any pharmacy without a prescription. Because families often can't afford to travel to town for medical treatment, parents attempt to treat the children with a concoction of medications bought from the local pharmacy. We had several patients who presented with adverse drug reactions including Steven Johnson's syndrome and paracetamol hepatotoxicity. It also caused diagnostic difficulties as self-prescribed drugs sometimes masked symptoms and made blood cultures difficult to grow. While I believe that availability of clean water, adequate nutrition, vaccination and education are the most important public health strategies to implement in Cambodia, I think there would also be great value in regulating the availability of pharmaceuticals.

A distressing feature of doing an elective in Cambodia is that it can be upsetting when you see patients with potentially treatable conditions who will end up dying because they can't afford the treatment. For example, I saw a 15yo girl with acute renal failure who was sent home to pass away because there is no dialysis and certainly no transplant surgery available. Another sad case was that of a 14 year old girl with acute myeloid leukaemia who couldn't afford the chemotherapy which cost approximately $150/dose and so again we had no choice but to discharge her to home.

One of the most valuable experiences I had at AHC was being able to participate in a few home visits. We travelled approximately 100km to rural areas to visit children who were taking anti-retroviral drugs for HIV. The purpose of the visit was to follow up their progress, check their adherence to therapy and to provide them with food supplies and education. I'll never forget the first family we visited because I left in a state of awe and shock. Here was a family of 13 that lived in a small wooden hut in a remote part of Cambodia. There was no electricity, beds or toilets and the nearest water supply was a small lake 10km away. Their income was approximately 5000 Riel/day (US $1.25) from selling flowers at a market about 30km away and their only form of transport was an old bicycle. To make things worse the father had alcohol dependence and misuse – spending 500 Riel on wine every day which not only reduced his inclination to work but also caused significant marital disharmony. Despite all this, I was greeted at the front of the house by 5or 6 smiling and giggling children seemingly very excited at having a visitor. Having already been in Cambodia for 6 weeks at this point, I thought I had seen it all but it wasn't until this home visit that I realised I had no idea. I believe it was an incredibly valuable life experience as it was a stark reminder of how lucky I am to live in Australia. It makes you look at life from a new perspective, because hearing statistics about life in other countries is just not the same as witnessing it first-hand. I implore people to try and get an opportunity to visit a developing country as I think it can only make you a better person.

I would like to thank the Jackson Family for their support through the Dr Carl Jackson Scholarship which allowed me to complete my elective in Cambodia.

References

1. *Friends Without A Border.* [Online] [Cited:] http://www.fwab.org/.

2. **UNICEF World Health Organisation.***CIA World Factbook, Heller Keller World Wide and Handicap International and the National Institute of Statistics.* Cambodia : s.n., 2008.