

## **Reflective report: Haemodialysis in End Stage Renal Failure in Sarawak**

Sarawak is the largest state in Malaysia,<sup>1</sup> and is the home to more than 40 sub-ethnic groups. Sarawak General Hospital is a state hospital, formally known as Kuching General Hospital. It is the largest hospital in the state of Sarawak, providing for a significant portion of this population from all socioeconomic and ethnic backgrounds. It serves some 1300 haemodialysis patients, around 10% of all dialysis patients in Malaysia, with 14 dialysis machines.<sup>2</sup>

It is at Sarawak General Hospital that I spent my elective placement. The primary aim of my project was to gain an insight into the journey of patients who undergo haemodialysis for ESRD in Malaysia. The secondary aim was to appreciate any barriers to treatment in ESRD and how this affects patients.

I tried to fulfil my primary aim by maximising patient contact by interacting with patients through different means, including speaking to both patients receiving haemodialysis and peritoneal dialysis on various wards; I attended a selection of different renal and general medicine clinics and also both nephrology and general medicine ward rounds. Speaking to various doctors also enabled me to gain a deeper insight into patient care.

Generally, British treatment guidelines were used at the hospital. Each patient on dialysis at Sarawak General Hospital is required to attend a dialysis clinic at the hospital every 3 months, whereby the fistula is reviewed, blood results are monitored for complications, and the patient's general health is monitored. Dialysis, like other treatment, is funded by private, government sectors and the non-government organisations, which provide funding for patients who do not meet the criteria for government funding, and who cannot afford private treatment.

Dialysis is becoming more widely available in the state of Sarawak, and indeed throughout Malaysia, which is reflected by the rates of dialysis treatment, which in Sarawak in 2001 was 66 per million population, this increased dramatically to 114 per million population in 2010.<sup>3</sup> Although many people with ESRD are receiving the required treatment, there are still sections of the population who are largely not receiving adequate treatment, such as discrepancies between different age groups. Recent data shows steady dialysis treatment rates over the past few years in patients with ESRD aged 55 years and younger. This suggests that patients in this age group were able to access treatment, however the treatment rate for patients aged over 65 has been and is continuing to rise rapidly. This could be due to a number of reasons; one possibility is the greater demand for dialysis in this treatment group than what is being provided.<sup>3</sup> Rural populations, who are often from lower socioeconomic groups are less likely to receive adequate treatment, due to a number of factors, for example difficulties in travelling to a treatment centre, due to poorer public transport links as well as a less well developed road system, and less money to fund treatment.

For many local people, complementary medicine plays a large part in their health beliefs and this can have negative implications on patient outcome. For example I observed a case of a 9 year old boy who was admitted with graft rejection after a renal

transplant done 2 years previously. His transplanted kidney was functioning normally until he had stopped taking the prescribed immunosuppressant medication, due to his parents' beliefs that it was no longer needed after 2 years and alternative medication would suffice. This case illustrates the potential for adverse health outcomes based on people's health beliefs.

The biggest contributing factor to ESRD in Malaysia is diabetes; in fact Malaysia has the highest percentage of incident dialysis patients with diabetes mellitus in the world.<sup>4</sup> I found this plausible through my observations at Sarawak General Hospital, whereby the majority of patients I saw on dialysis had diabetes. Inadequate blood glucose control is clearly an issue which needs to be addressed in order to improve health outcomes in those with renal failure, and also in preventing renal failure and subsequently dialysis treatment.

Overall, the provision of haemodialysis was better than I had expected in Sarawak, with many people living in both rural and urban areas who require the treatment to be receiving it. However there is still plenty to be done both in preventing ESRD from developing, and also in targeting certain disadvantaged populations. My elective placement has really highlighted the fact that despite following British guidelines for ESRD treatment in Sarawak, one's culture and health beliefs really impact on the overall outcome of the patient.

#### References

1. Agreement relating to Malaysia between United Kingdom of Great Britain and Northern Ireland, Federation of Malaya, North Borneo, Sarawak and Singapore. 1963.
2. Yun LY. Dialysis centre to open next year. Borneo Post online 2011. Accessed 23/06/12.
3. Ngo LY, Ahmad GB, Choon TC, Guat LD. Dialysis in Malaysia: 18<sup>th</sup> Report of the Malaysian Dialysis and Transplant Registry 2010.
4. 2005 Annual Data Report. Chapter 12: International Comparisons. United States Renal Data System. [www.usrds.org](http://www.usrds.org) Accessed 20/06/12.