

Elective report 2011

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Acknowledgements

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Introduction

Undertaking an elective has always been the part of my four year medical journey that I looked forward to most. I am happy to say that it did not disappoint either!

My elective was an amazing 5 weeks at the Royal Prince Alfred Hospital (RPAH), Sydney, Australia (Figure 1). I hoped that travelling to the other side of the world would give me the opportunity to contrast Medicine in a new climate, with different people, whilst improving my clinical skills in a first world setting.

Figure 1: RPAH



Renal medicine has always fascinated me. I enjoy the diversity of this field, which encompasses many different aspects of general medicine, as well as cutting edge immunology and nephrology. There is the challenge of managing acute kidney injury, varied with chronic renal failure, as well as renal transplantation with the chance to restore patients health and quality of life. A career in renal medicine much appeals to me, however I have had limited clinical opportunities to spend time in this area. Thus, I decided to undertake a placement in renal medicine to provide me with a greater understanding to this field.

I hope this report will provide some insight into what I gained during my time in Australia, and why I enjoyed it so much.

Background

Sydney stretches across 1580 sq km, similar to London, making it one of the largest cities in the world. It has a population of 4,575,532 and is without sunshine for only 23 days of the year. It is the largest and most populated city in Australia and the state capital of New South Wales (NSW). I felt

that this made this destination ideal to see a wide variety wide variety of patients, with diverse signs and symptoms.

RPAH opened in 1882 as a 146-bed hospital. It was named after His Royal Highness Prince Alfred, later Duke of Edinburgh, after an assassination attempt while on a picnic in the northern Sydney suburb of Clontarf. RPAH is now acknowledged for being a major metropolitan tertiary referral centre for NSW. It is the principal teaching hospital of the University of Sydney, and remains one of the country's most respected hospitals serving the health needs of local, state, national and international communities.

Australian healthcare

Australia provides comprehensive healthcare coverage, as in the UK, but it provides it in a different way with the use of insurers, public and private. Private includes primary and specialist care, together with the comprehensive services also available in public hospitals. Public health is influenced by the federal system, with the government, state and regional authorities sharing responsibility and funding. Traditionally, health services were administered centrally in each state, but recently there has been devolving of decision making to communities and regionalizing services. Together with hospitals and community health services in towns and cities of a minimum size, there are specialist services in more remote areas, including the infamous Royal Flying Doctors.

Medicare is Australia's national health funding system, controlled by the government's Department of Health and Ageing (DHA). It is a mandatory insurance system which aims to give all citizens access to affordable healthcare. Medicare is financed mainly by general taxation (with a 1.5% income tax levy, with an additional 1% on higher rate taxpayers not taking private insurance). All residents are encouraged by the government to take out private healthcare on-top, giving free in-patient stays, 85% subsidies for specialist services and 75% subsidies for GP treatments. Patients have to pay any 'excess' at the point of care unless they are exempt, have insurance or a low earners card providing free government funded care. Medicare does not cover a number of services, including physiotherapy, dentistry, optometry and chiropractic care.

Chronic conditions have increasingly become the new burden of disease in Australia, away from acute conditions, due to an ageing population and a more affluent lifestyle. This is expected to cause a heavier burden on health service demand. Health expenditure is approximately 8.9% of GDP.

My experience at RPAH

During my time at RPAH, I was attached to the renal firm and the renal transplant team, which would mostly involve attending ward rounds, performing the jobs of an intern (or a F1) during the

day, and going to meetings and clinics. It was interesting to view how the hospital ran in much the same way as to the UK, which made it very easy for me to adapt.

I was able to develop much of my clinical skills during my time on the wards. I got a good insight into the role of an intern, which was very similar to what I had seen the F1's do in the UK. I felt that medical students were treated with more responsibility in general than in the UK. This meant being more actively involved in the patients care. In the UK I had been more used to a more observational role in my medical rotations, where I usually felt in the way of the firm I was working with. I had been used to taking a few histories from patients, answering questions from consultants and doing the few odd tasks. However, working at RPAH I felt I had a more practical hand-on role, which I really enjoyed. This would include, writing in the patient's notes in ward rounds, being involved in the management for patients in the wards, writing discharge summaries, requesting consults from seniors, taking bloods, and putting in cannulas and catheters regularly. I felt as a student as though I was an important part of the team and that I had the support of the doctors to back up my inexperience and limitations. This was important when I was able to carry out new clinical skills, including putting up drips, fluids and carrying out tapping ascites.

I spent some time undertaking self-directed bedside learning. This would involve seeing in-patients with signs, and reporting my history, examination, differentials and management plan to different members of the renal firm who had already seen these patients. I would then receive feedback. This was very useful to me in not only learning more about renal medicine, but understanding where I was making mistakes and how to efficiently speak to seniors. It also gave me a good chance to get to meet the variety of people who live locally and within the state. I would also see patients with the registrar and receive teaching. I was able to see conditions more common to Australia, including certain types of glomerulonephritis, together with a variety of conditions familiar in the UK, such as diabetic nephropathy.

I was able to attend a weekly seminar of case presentations from final year students of the University of Sydney. In front of an audience of approximately 50 students, as well as clinicians, surgeons and academics, students would present a 20 minute case in the area they were studying as part of their degree. I was aware of a different style students in Australia report their cases. I found it more systematic, critical and thorough, following the whole patient journey. Presenting cases to a large group is something which I feel we get limited chances to do within our course in Warwick. Upon request, I was given the opportunity to present a case I had seen in renal transplant. This was a kidney donation from a 25-year-old daughter to her 56-year-old mother, due to the mother having IgA nephropathy. I talked about the indications for kidney transplant, the pre-operation medical management, the laparoscopic donor nephrectomy and recipient kidney open transplant surgery, and the post-operation management of mother and daughter. The talk was well received and I managed to answer questions about complications and the ethical considerations of transplantation. I feel this helped to improve my knowledge of transplant medicine, as well as my confidence and

communication skills, and that they were at a standard that people from the other side of the world could understand me!

Within the renal team I spent a lot of time with one of the registrars. Whilst he was young compared to most other registrars, it was very clear to me that his knowledge of medicine was still vast. However, what impressed me most was his rapport and his willingness to not only ensure all the patient's medical care was addressed, but to ensure the social and psychological side was too before they were discharged. For example, a 20-year-old female presented with asymptomatic hypokalaemia on a blood test from her GP, with no obvious cause upon history, examination, or investigations when seen by the junior doctors. The registrar immediately developed a very sincere rapport with the patient, and whilst initially denying the use of diuretics to other doctors, she admitted to him that she was taking them for weight loss purposes. I felt she opened up to him because of his reassuring attitude. He then discussed her concerns, and they arrived at an agreed management plan to stop taking diuretics and also arranged for a further psychiatric assessment. At Warwick University I have been taught the importance of communication, including techniques like eliciting the patients ideas, concerns and expectations (ICE). However, in practice I had seen very few senior doctors really address this well. I found this attitude quite refreshing, and I found that it gave many patients much peace of mind. I hope to be able to emulate this holistic style in future with patients.

I was able to also spend some time in the dialysis unit. Here I was able to understand the indications and complications of dialysis from the nurses. By also speaking to a number of patients I was able to understand that the choice of haemo- vs peritoneal dialysis depended not only on medical factors, but also on social and psychological factors.

Aboriginal health

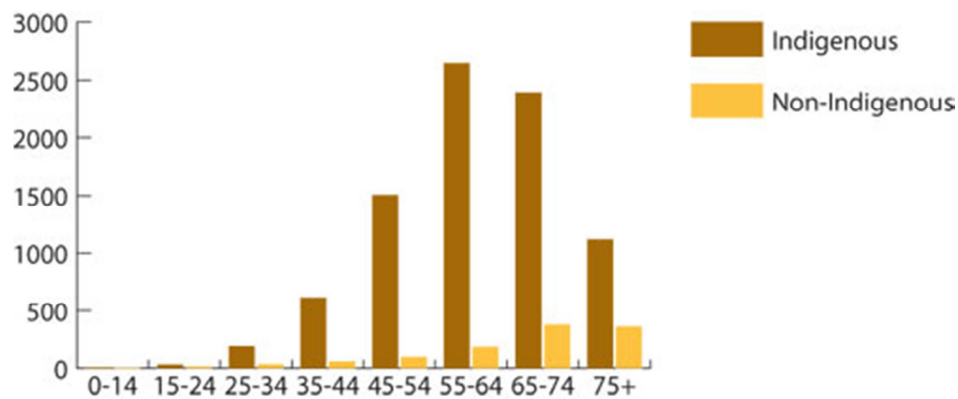
I lived in a dormitory in Newtown, which was a 10 minute walk from RPAH. Upon making my way to hospital I noticed that the pedestrian crossing lights were lighting fast. I had to walk pretty fast to avoid myself getting run over by the inpatient cars! It made me think how the elderly and frail would manage in such a situation, which is when I noticed that there were actually very few walking around. Newtown is a very young and vibrant town, and the same can be said for much of central Sydney. It was only when I arrived at the hospital did I realise where all the elderly were, although fortunately not all as a result of a road traffic accident! I also noticed on the renal wards particularly a disproportionate number of Aboriginal people. Up until this point I had seen only a handful of indigenous Australian's in central Sydney. I wanted to get a better understanding of why this was so.

The indigenous people make up more than 2.5% of Australia's population. Since British colonisation 300 years ago there have been many problems for the Aborigines. Even today, there is much unofficial discrimination and they remain underprivileged socially, politically and economically, with

less than half the national average wage and an unemployment rate six times the national average. Policies to solve the lack of integration have made little impact, and the large differences in culture with the non-indigenous population mean this may be a problem for many years.

The indigenous population are twice as likely to report poor health and 1.5 times as likely to have a chronic health condition. Life expectancy is estimated at 67.2 years for Indigenous men (11.5 years less than non-Indigenous) and 72.9 years for Indigenous women (9.7 years less than for non-Indigenous). A number of diseases are much more prevalent among the Aborigines compared to non-indigenous, including up to 30-fold increase in end-stage renal failure (ESRF) and an 8-fold increase in deaths due to ESRF (Figure 2) (Australian Bureau of Statistics, 2005).

Figure 2: End-stage renal failure: age-specific notification rates (per million), by Indigenous status, Australia, 2004-2007



Source: www.healthinonet.ecu.edu.au

There are numerous factors which contribute to the high rates of ESRF among the Indigenous population. Obesity is 1.5 times more common. Signs of syndrome X (raised blood pressure, insulin, blood glucose and lipid levels), skin infections, post-streptococcal glomerulonephritis, and family history of renal disease are all more common. Social factors including poor housing and nutrition, lower activity levels, and higher levels of tobacco and alcohol consumption also contribute. In 2003, diabetes was the primary cause of ESRF for over 55% of Indigenous patients on dialysis compared with 18% of non-Indigenous patients on dialysis. Diabetes is 3.5 times more common in among Indigenous people than among other Australians. Other conditions are also more prevalent among the indigenous, including cardiovascular and respiratory (Spencer et al., 1998).

Despite representing 1 in 40 of Australia's population, 1 in 10 Indigenous require renal replacement therapy (RRT) each year. However, they are one-third as likely to receive a kidney transplant compared to non-indigenous. There are a number of reasons for this including a lower success rate for Aborigines who receive a transplant, a higher chance of infections, a lack of compatible donors, access issues and miscommunication (Cass et al., 2003).

A number of strategies have been implemented to try and tackle these problems of the Aborigines:

- Improvements to infrastructure of living conditions, education and health services.
- Reducing blood pressure, weight and improving diet
- Screening and interventions, e.g. urinalysis for chronic diabetes
- Aboriginal liaison officers and involvement of local workers, which can improve cultural awareness and communication.

A bit of time away from Medicine...

Somehow I managed to find a few hours away from the busy renal wards! I was able to see the attractions of Sydney and travel up the sunny east coast of Australia. I saw many once in a lifetime sights in a very short time, which I like to believe took some planning and organisational skills. It definitely did take away a lot of my money!

I was able to fulfil two personal ambitions. The first was to undertake a skydive from 14,000ft, with a 60 second free fall. Whilst being reassured by my instructors that this was a very safe activity, this required much determination and courage to face my fears. The second was to undertake a dive into the amazing Great Barrier Reef. Although if I'm honest, I thought it looked better on TV with Sir David Attenborough narrating!

One activity which I thought I would mention was a 5 hour extreme white water rafting expedition with 5 other people down the river Tulley, Cairns. Whilst this was not only a massive exercise of endurance, I found I learnt much about operating in a new team in difficult conditions. I had to lead at times, being calm but decisive and giving instructions to my team when needed. I was also able to listen and follow instructions from other team members so that we could co-ordinate our actions together. This resulted in us finishing safely and ahead of the other groups rafting, and with our raft only being flipped over 10 times! Well, it was the extreme rafting after all!

Conclusion

Overall I would say my elective was an extremely valuable experience. In terms of my original aims, I was able to see Medicine in a new climate, whilst improving my clinical skills.

I found hospital medicine in Australia to be very similar to the UK. This was not only in terms of the technology, resources and layout of the hospitals, but also in terms of practice. Perhaps this is unsurprising as it also a first world country, however, I was perhaps expecting a more laid back approach which I had seen when I was out and about in Sydney. However, the hospitals were anything but relaxed, and the renal department was a very industrious unit. In terms of travelling it is one of the friendliest places I have ever been to, and made it very easy to integrate in the hospital and away from it. I was id learn about how the Australian healthcare system is run differently to the NHS.

I feel that my experience that vastly improved my knowledge in renal and transplant medicine but has also improved my clinical skills, whilst learning new ones. Being able to work as a part of the firms has made me more confident that I will be able to do the job when I graduate. I feel that my attitudes have also changed, by being more aware of the importance of the team but also how as an individual I can make a big difference to patients. I saw the registrar adopt a sincere rapport with his patients, and really listen to their concerns, and this is something I would like to ensure I adopt more in future, rather than making sure I tick the ICE criteria. I also feel that I have become more aware of a more systematic and critical approach to reporting patient cases, as I saw when I attended the student seminars. I feel my medical knowledge has expanded in the area of the Indigenous population of Australia, and made me more aware of how their renal health problems are hoped to be improved.

I was apprehensive about coming to the other side of the world by myself, but I feel that I have grown in a number of ways. I learnt a lot medically whilst also being able to immerse myself in the local culture. I can only give my full endorsement to future students to carry out their elective in Australia.

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