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PAEDIATRICS

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Elective Report – Karapitiya Hospital, Galle

I undertook my medical school elective at the Karapitiya Hospital in Galle, southern Sri Lanka. It is the main teaching hospital for students from the University of Ruhuna, and boasts a wide array of services and specialties, ranging from medical, paediatrics and obstetric wards, to state of the art surgical and dental facilities, to the availability of psychiatric services. Established in 1982, it is the largest tertiary care centre in the Southern Province, consisting of 1,560 beds and 54 wards.

My elective period of 2 weeks was focussed largely on the paediatric wards, though I was also lucky enough to gain some experience of the medical wards as well. Karapitiya's mission statement, as stated on its website, is to "improve the level of resources and facilities for the purpose of training, teaching and research activities"; such an institution provides the perfect backdrop for comparing and contrasting healthcare delivery in the UK versus more resource-poor regions. The experience I have received has been instructive in several ways, and I have found five areas of interest to discuss. First, observing patterns of disease and illness common in the Sri Lankan population, and how this compares to the UK; second, how health provision both mimics and differs from that seen in the UK; third, a direct comparison of resource availability; fourth, how medical education is directed; and finally, how my experiences will impact on my own future practice.

Patterns of Disease:

The paediatric unit at Karapitya is broken down into several areas, which highlights the predominant patterns of disease I witnessed there. The unit houses 78 beds, which are broken down into an infectious disease unit (the largest present), a special care baby unit for premature newborns, an acute unit (with 4 beds in an air-conditioned side room), and a metabolic disease unit. However, due to bed shortages these divisions are not always adhered to. Moreover, for less sick patients there are seated areas where they are asked to wait before being seen by a doctor.

The biggest difference in disease pattern is the high prevalence of infectious disease and malnutrition. During my time on the wards, I witnessed cases of measles, typhoid and malaria, diseases which are not seen in the UK regularly due to vaccination coverage, public health campaigns and the lower climate. Moreover, there were numerous cases of pneumonia, meningitis, viral hepatitis and gastrointestinal infections, which while common occurrences in the UK, appeared to present much later in Sri Lankan hospitals, with a much higher degree of severity and associated complications. One example was of a child who had been diagnosed with meningitis in the community, but instead of being admitted for immediate intravenous antibiotics, had been given oral ceftriaxone. As a result, he developed a cerebral abscess, which worsened his prognosis and extended his hospital stay. Another example was a child who had developed a community-acquired pneumonia, but due to the parent's living some distance from the hospital, was not brought in until she developed a pleural effusion which further worsened prognosis. Snake, spider and scorpion bites were also a common reason for admission.

Malnutrition was the other area that differed significantly from the UK, where it is only seen in cases of abuse or anorexia. This was common in children in Sri Lanka, either due to their parents being unable to feed them as required, or as a result of chronic disease that has not been treated adequately. Similar to the UK, these babies are plotted on growth charts, and it was clear to see from a number of cases how height, weight and head circumference had gradually declined.

Associated with this was the risk of refeeding syndrome – something I had only seen in geriatric and anorexia patients in the UK.

Other disease, including genetic (e.g. osteogenesis imperfect, thalassemia), congenital malformations (e.g. VSD, PDA), metabolic (e.g. mucopolysaccharide) and cancer, seemed to exhibit similar levels of prevalence to the UK.

Health Provision:

Much like the NHS, Sri Lanka provides free healthcare at the point of delivery. This means that no patient is turned away. However, due to the lack of facilities, this also means wards can become extremely crowded and unhygienic. Moreover, while the standard battery of investigations and treatments are available, for more complex cases, patient's families have to cover the cost of more detailed investigation and treatment, something rarely seen in the UK. As mentioned above, the lack of beds means patients are triaged so that the "more well" patients are not given a place on the ward but asked to wait in a seated area before being seen by a doctor, in a scenario similar to UK outpatient clinics.

The wards themselves are crowded and do not adhere to the same infection control policies we have in the UK. It is common for animals such as dogs and cats to be wondering around the beds, and in some cases, such as for admissions for insect or snake bites, patients may even bring in the offending animal to acquire the appropriate anti-venom. The wards are open to the outside air, meaning that there is a risk of both airborne and insect-borne disease. Unlike the UK, handwashing does not seem to form an important role in infection control, and alcohol gel is only present in the SCBU. Doctors do not use disposable gloves, aprons or facemasks as these are simply not present on the ward. This seems to increase the risk of transmission of infectious disease from patient to patient. Moreover, the wards are not air conditioned or temperature controlled, meaning sick, pyrexial patients often have to put up with temperatures of over 30°C.

However, despite these restrictions, largely brought about by budgetary constraints, the standard of care delivered by doctors and nurses remains very high. The wards are highly staffed, and doctors are knowledgeable and extremely competent. I was impressed with the diagnostic skills of the doctors, who seemed to rely more on clinical examination and much less on ordered investigations to form differentials. Many of the standard treatment protocols reflect evidence-based practices from the UK and US. Note-keeping is meticulous, both for inpatients and in discharge summaries, and consultant-led ward rounds occur at least once a day. The lack of computer systems for storage of this information can lead to some confusion due to the profusion of paper notes, but this is common in the UK too.

Resources and Welfare:

As mentioned above, there is a significant difference in the level of resources available in Sri Lankan healthcare compared to the UK. This means that while the basic principle of Sri Lanka healthcare is similar to the NHS, in reality it does differ, with less equipment, space, infection control, investigations and treatment available.

In discussion with one of the consultants on the ward, we asked about whether there was a welfare system in place and how it operated. Social care is available in Sri Lanka, with eligible families

entitled to receive Rs 300/month if they fall below a certain earning threshold – the equivalent of about £1.50. This really brought home the difference in the levels of what we in the UK are accustomed to receiving compared to what those in more deprived regions receive. Though schooling, school uniforms, university education and healthcare are all delivered largely free of charge or at least heavily subsidised, it was the consultant's belief that the Sri Lankan system is more geared to winning electoral votes than helping those in real need.

Medical Education:

It was really interesting to take part in a Grand Round, teaching sessions, student ward rounds and case based discussions with the final year students at Karapitiya Hospital. The medical students I met were all courteous, well read and knowledgeable about their subject; however, there were several differences in the education they received compared to what we are accustomed to in the UK.

First, each "firm" of students is composed of about 30 students at a time; this is grossly different to the UK, where the large number of teaching hospitals allow us to spread the load somewhat. This did make consultant-led ward rounds an interesting experience, with up to 40 people often crowded into a small space, made worse by the heat and the inability to hear what was being discussed at the front of the group. Despite this, consultants gave students a lot more of their time with directed teaching – which reflected two things; first that in the UK we are spoilt with the number of patients and learning opportunities available; and second that in Sri Lanka the students are made to feel more like part of the team and that their work matters.

Having said this, the structure of medical education is much more hierarchical in Sri Lanka, which seems odd given how hierarchical it is in the UK! Respect for the consultants is ultimate, and it was not uncommon for students to be given very public ticking-offs for not attending to their work appropriately. This means that student participation is often minimal – perhaps due to fear of punishment, it is rare for students to speak out or speak up when asked a direct question! This is similar in some respects to the UK, though it seemed more pronounced in Sri Lanka.

Placements are much longer than in the UK, with students asked to attend each firm for a minimum of 2 months, which may then be revisited in any other academic year. This gives students a much broader perspective of each clinical specialty than we get in the UK. Moreover, the link with community medicine is strong; we were told that a group of 12 students are given the care of 25 families in the community, during which time they have to divide the families up between them, monitor the growth, development and needs of children and family, and then write a report with their findings and recommendations. This seemed a very active way of conducting a community medicine course, something medical education in the UK can learn from, as our experience is often very passive at GP surgeries. Students are rigorously assessed through written exams, OSCEs and written pieces of work, seemingly much more than in the UK – and as we were told by our consultant, passing is no easy thing; indeed, he even listed the "three levels of failure" that can occur!

Grand rounds are slightly different to that seen in the UK – two doctors are given a case to discuss at the front of the round, during which time they have to take an appropriate history, come up with a list of differential diagnoses and then open this up to discussion with the rest of the group. This

seemed an interesting, active and involved way to run the grand round. Where it was similar to the UK was the provision of a free lunch (but of much higher quality)!

One surprising aspect of medical education is how it is paid for; students are heavily subsidised for their education, having to only contribute Rs 250 to their tuition per year. Moreover, for those that choose to stay in hostel accommodation, this is also heavily subsidised. This is in stark contrast to both the UK, where tuition fees upwards of £9,000 per year have been recently introduced, and the US, where tuition can total $20,000 and a year's living costs can spiral to as much as $50,000. In this respect, Sri Lankan medical students are very lucky. Moreover, up to 30% of Sri Lankan medical students choose to leave the country despite this subsidised education once they qualify, to either head to the US, UK or Australia, in contrast to what we see in the NHS. Indeed, speaking to the consultants here, many doctors are actively encouraged to seek employment abroad following qualification for at least a couple of years to gain experience of a different healthcare culture – something we should seek to encourage in the UK.

Reflection – How This Affects My Future Practice

Coming to Karapitiya has been a real eye-opener for me. Seeing how a system that operates with the same principles as the NHS, but on a much tighter budget, has been really interesting. It demands much more of the doctors, both in their clinical acumen and in their ability to handle a huge range of disease. I have found the experience quite tough, both physically and emotionally. Taking part in ward rounds in crowded, heated wards demands a high degree of stamina and patience. Moreover, seeing the state of some of the patients and the living conditions they have to go back to in the community was sad and in some cases shocking; seeing patients who may never recover was also heart breaking, particularly in cases where earlier treatment or diagnosis might have made a significant difference. The wards offer little patient privacy or confidentiality, reflecting a real difference in the practice we are encouraged to follow back home. In some ways this was what I expected, but it was still a shock to see firsthand.

Unfortunately, I did not gain much in the way of clinical experience during my elective. We were treated as medical students, and given the crowded nature of the ward we were unable to get much "hands on" experience. However, I did see a wide range of interesting clinical cases, symptoms and signs which we do not see in the UK as patients tend to present more unwell in Sri Lanka.

I was able to observe many Sri Lankan patients during my elective, and learned the people are very stoical, putting up with hot, unhygienic conditions that would not be stood for in the UK. Patients accept doctors as an authority, and there is much less concordance in treatment decisions; thus, they are also a lot less demanding than I have seen in the UK! The healthcare professionals I observed were all extremely hardworking and competent, working with limited resources and forming diagnoses from clinical signs and symptoms rather than ordered investigations. There was also a real emphasis on teaching and involving medical students in patient care.

The best parts of the elective for me was seeing a wide range of interesting, unusual cases, and interacting with medical students from another culture. Getting to know aspects of Sri Lankan cuisine, culture and the people was also interesting. The bits I least enjoyed was seeing patients suffering in difficult conditions for which little could be done given the limited resources and their late presentation to the ward; this was particularly pronounced on the paediatrics wards, with very sick children and their helpless families forming a very emotive backdrop to my elective experience. It was hard to think that but for slightly better funding and earlier identification these patients could have enjoyed a much better prognosis.

Though I had an interesting time and received good teaching on my elective, I found the lack of hands on experience frustrating, particularly when I felt I could have contributed positively in an environment of stretched resources. Thus, though I would recommend the elective to other students due to seeing such a wide range of unusual cases with good teaching opportunities, it would be with the proviso that hands on experience is limited. This would certainly put me off applying for the elective in future.

The elective was really useful for helping to identify career objectives for me; working in the hospital environment in Sri Lanka was challenging, and I believe I could contribute positively with more experience. I am therefore determined at some point in the future to spend some time abroad

working in a hospital that is not as fortunate in the facilities and care it can offer compared to the UK.

There were no derivations from the risk assessment, apart from one time when a patient's family brought a venomous snake on to the ward! Our accommodation was a homestay with a lovely Sri Lankan family with links to the hospital. They made us feel extremely welcome, and provided us with comfortable rooms, invaluable local knowledge and excellent home cooked food! We largely used local public transport while in Galle, in the form of buses or tuk tuks. The buses were often crowded and extremely hot, but it was a unique experience I'm glad to have had the opportunity to experience (and extremely cheap for students).