

Andrew Dent Student Scholarship

Elective Report: Tupua Tamasese Meaole Hospital in Apia, Samoa

By Grace Chan

The wards at Tupua Tamasese Meaole Hospital are beautiful and far removed from the sanitised, scrubbed-linoleum corridors of my home hospital in Melbourne. As I walked into the internal medicine ward on the first day of my elective, I marvelled.

Patients, thin and obese, lay six-per-cubicle, in beds spread with patterned sheets brought from their own homes. Their families slept or sat on the floor around them, on makeshift mattresses, ready to tend to their loved one's needs. (I soon discovered that Samoan families are unbelievably dedicated to their sick relatives, acting as stand-in nurses, physiotherapists and advocates). Windows and doors stood wide open, allowing gusts of hot air to blow back and forth through the ward. Curtains billowed in the tepid breeze: red, purple, magenta flags.

The noise of nearby construction work—they are currently building a new hospital building next door—blared intermittently, making it difficult to appreciate crackles and murmurs when examining a patient. Outside, open corridors and ramps stretched off to the obstetrics & gynaecology, paediatrics, surgical and emergency departments. Stray animals roamed the grounds.

TTM Hospital is the main hospital in Samoa and is located in the capital of Apia. It is a teaching hospital and receives referrals from the rest of the country. I spent the large part of my four-week elective with the wonderful internal medicine team, who quickly opened my eyes to the differences between medicine in Samoa and Australia.

On day one I was emphatically told that “everything in Samoa is a delayed presentation,” and over the next four weeks I realised the truth of the statement. On my first day I met a diabetic gentleman with an infected arm, who had waited two months before presenting to hospital. Textbook descriptions of countless core clinical conditions manifested themselves in patients sitting in front of me. We saw heart failure patients every day on the ward rounds, and quickly learned to elicit all the signs: pitting

oedema, raised jugular venous pressure, enlarged liver, cold peripheries, lung crackles. Bronchiectasis patients were emaciated, with clubbing, coarse crackles and a characteristic odour. I spent one morning in the emergency department and met a gentleman with the



most recognisable case of chronic gout I had ever encountered—you could have diagnosed him from twenty metres away. I had seen nothing like it in Australia.

Lack of compliance is a major issue in Samoa. Patient adherence to medication is limited by lack of understanding of medical instructions and types of medication, complexity of some medical regimes, and competition with traditional healers, herbalists and 'magic doctors'. One patient presented with a re-infection of a leg ulcer that was exacerbated by the long-term application of a herbal poultice. This is not uncommon. Patients with diabetes and extremely elevated blood sugar levels frequently admitted to not taking their medications.

Self-medication is another key problem. One young man, who was eventually diagnosed with typhoid fever, had taken some pills prior to his admission. They were given to him by a friend, and he had no idea what they contained. Anti-inflammatory medications such as Nurofen are readily available over the counter in Samoan pharmacies and are a factor in the prevalence of upper gastro-intestinal bleeds, as many patients over-medicate themselves for chronic pain. On one particular morning, we saw three patients in the four-bed HDU with upper GI bleeds and consequent haemodynamic instability. The consultant emphasised to us the importance of recognising this problem.

As I spent time working with the team, the limitations faced by doctors at TTM Hospital became apparent. The hospital has only one physiotherapist. The sole pathologist, who was working well into his eighties, passed away shortly before I arrived at the hospital. During my elective, there was no pathologist on site and tests as simple as thyroid function tests had to be sent to New Zealand for processing, which would take two months. The sole radiologist had also recently passed away; a Chinese CT specialist was working as a volunteer in his stead. Doctors on the medical ward interpreted their own X-rays.

The hospital's blood bank is understocked and operates on a trade-off system: families of patients undergoing surgery must all have their blood type tested. If they are compatible with the patient, two units of their blood is taken prior to surgery and transfused to the patient if the need arises. If there is no compatibility, the family must still donate an equivalent amount of blood to the blood bank in order to maintain supplies.



In my third week, a twenty-two year old man with Guillain-Barre syndrome was admitted to HDU. When I examined him, he was entirely unable to move his arms or legs. He was on high-flow oxygen and struggling to breathe. While the standard treatment



for Guillain-Barre in Australia would have been to start him on immunoglobulin therapy immediately, it took a week for the hospital to arrange delivery of a limited supply of immunoglobulin from New Zealand, and it cost no small sum of money.

Other limitations included the lack of angioplasty and cardiac catheterisation, in the face of prevalent coronary artery disease. Also, patients diagnosed with cancer must be sent to New Zealand if they are to receive radiotherapy or chemotherapy.

I was able to see an immense variety of conditions first-hand during my elective. Diabetes and its complications, heart disease, strokes, typhoid fever, rheumatic fever, gout, pneumonia and sepsis are all common in Samoa. Other patients I encountered taught me about gastro-intestinal bleeds, bronchiectasis, miliary tuberculosis, seizures, endocarditis, liver failure and renal failure.

The internal medicine team truly inspired me in their practice of medicine. One of the consultants (who visit to conduct rounds once or twice a week) emphasised to me that in order to be a physician in Samoa, you must be a generalist—but a very good generalist. I listened as these doctors imparted detailed knowledge across all body systems and medical disciplines. They were able to make confident diagnoses based on careful history and examination, without advanced tests and imaging. The interns and registrars alike impressed me with a strong sense of capability, commitment to their patients, and willingness to teach. I felt moved to strive towards a higher standard of medicine in my future career.

In Samoa, the family unit is one of the most important societal structures. During our orientation we were taught about the extended family unit, the *aiga*, and the chief of each family, the *matai*. The Samoan matai are highly respected members of the community and constitute the democratically elected parliament. The strength of family bonds is evident even in the hospital. Walking down the open concrete corridor to HDU, I saw relatives camped out on makeshift mattresses, surrounded by canvas bags full of food and toiletries. It was rare to encounter a patient without one, two, or even a crowd of family members surrounding the bed. It was encouraging and uplifting to see the commitment families showed to their mothers, fathers and elders, even going so far as to take responsibility for changing patient's dressings and bathing the patient.

Since my main interest is in internal medicine, I spent most of my time there; however, I did have the opportunity to visit the emergency department, outpatients and the obstetrics and gynaecology ward. The outpatients department, a row of curtained cubicles directly adjacent to emergency, was always crowded, with up to a hundred patients fanning themselves in the waiting room. Obstetrics and gynaecology was also a busy ward, with deliveries happening daily. Common medical issues included gestational diabetes, fetal macrosomia and pre-eclampsia.

I travelled to Samoa with several other Melbourne University medical students, and we had arranged with the Victorian Students' Aid Program to transport medical equipment to TTM hospital. Thanks to VSAP, we were able to donate a selection of requested supplies to the hospital, including scrubs, crepe bandages, syringes, needles, textbooks, stethoscopes and hand sanitiser.

During our time in Samoa, we also liaised with the Samoa Cancer Society, a relatively new organisation that aims to raise awareness about cancer both amongst health professionals and in the general Samoan community. Working together with the lovely team at the Cancer Society, we were able to organise a series of educational workshops for nurses at TTM Hospital and rural hospitals in both Upolu and Savai'i, Samoa's two main islands.

The interactive component of the workshop involved asking the nurses what issues regarding cancer in Samoa they wished to address. Their responses were enthusiastic and revealing. The nurses were keen for increased education about cancer, particularly training in the management of palliative patients. During the workshops we also gave a talk about the physiological basis of cancer, the five most common cancers in Samoa, with an overview of symptoms, investigations and treatments, and encouraged the nurses to seek information from the Cancer Society whenever the need might arise in the future. The workshops were well attended and I had a very enjoyable experience contributing to the Samoan community in a small way. It was also interesting to see the wide range of understanding even amongst nurses. Some had an excellent grasp of the basic physiology and management of cancer, whereas others had misconceptions that needed to be clarified. Examples of these included the misconceptions that cancer can be spread by saliva, that family history and cancer risk is passed down through the bloodstream, and that cancer is a fatal condition for which nothing can be done. Nevertheless it was very uplifting to see that the nurses had such a spirit for learning and a passion to push for better care for their patients.

I embarked upon my elective eager to discover another country and to make connections with doctors and medical students at TTM Hospital. I ended up having a most eye-opening, educational and enjoyable experience in Samoa. The learning curve of the elective is very steep and the doctors are keen to teach if you make yourself available and involved. The only downside of choosing TTM Hospital is that it has become ever more popular in recent years, and ward rounds can get quite crowded! Nevertheless, if you stick around and offer to help, there is always something to do.

The accommodation I stayed at was full of medical students and weekends always involved a short road trip to a beautiful beach, in a big white van driven by the owners, Papa and Brenda. I thoroughly loved learning about the culture of the Samoan people—the *fa'a Samoa*—and had a wonderful time roaming through the

town, exploring the flea markets, and soaking up the sunshine on Samoa's amazing tropical beaches. Driving through local villages, you see extended families playing volleyball on their front lawns, old men sitting in the grass watching cars pass, and young lads carrying logs down the street. Samoa's simple way of life is something to be admired.

In order to improve health care in Samoa, I feel that many things need to be changed. There must be a stronger push for preventative measures, such as enforcing the illegality of riding in the back of pick-up trucks, and encouraging improved diet and lifestyle. There is a need for rigorous management of existing medical conditions like diabetes and heart failure. There need to be more incentives for doctors to remain and work in a hospital that is short-staffed and limited in terms of resources. Dr. Limbo Fiu and Dr. Viali Lameko, two of the head medical consultants and TTM Hospital, have worked hard to establish Oceania University of Medicine as a training medical school for Samoan and other Pacific Islander medical students. In recent years, the medical cohort has expanded greatly. It was a joy to be taught by Dr. Fiu and Dr. Lameko and to work alongside OUM students during my elective.

In summary, my elective taught me a great deal, both about medicine and the problems that face a hospital in a developing country, with limited access to the resources we are so blessed with in Australia. The Samoans are a very welcoming people and really made me feel at home while I was there. I definitely hope to return in the future to TTM Hospital. It was an invaluable experience.

