

A Medical Elective in Samoa: Working as a Community to Provide the Best Healthcare



My anaesthetics family

Esjae, Cecelia, L'amour (head consultant), Dr Yu, me, Corey, Pesa (left to right)

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Introduction

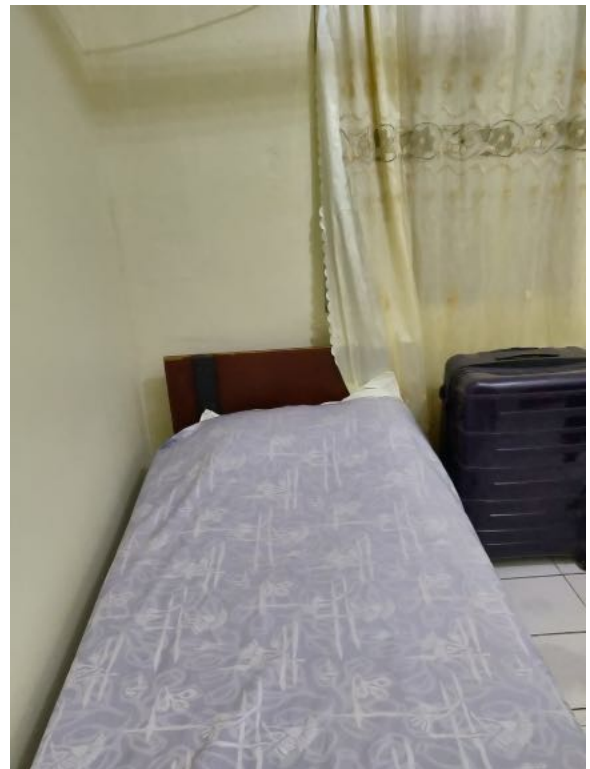
I spent 8 weeks of my summer in the Tupua Tamasese Mea'ole Hospital in Apia, the capital city of Samoa. I was in the anaesthetics department, starting out as an observer before becoming part of the team. Samoa is a country in the South Pacific with a population of ~200,000 people and has two main islands, Upolu and Savai'i. Upolu is slightly smaller but has the capital city and the bulk of the population as well as infrastructure.

Samoa Life

While in Samoa, I stayed with the Neltzers, a family who live in a village just outside of Apia which is close to the hospital. Lynn is the mother of 6, a small number of children by Samoan standards, however few of them live permanently in Samoa. Two of her sons and one daughter live in Australia, one daughter lives in Samoa, and the other two sons spend about half their time in Samoa and the other half studying abroad. This meant that I was given my own room while I was there which I was very thankful for. My initial reaction to the room was that it was fairly sparse, with just a bed with a flowery sheet in traditional Samoan style, and a rail for hanging clothes. While the room never felt less sparse throughout my stay, it was less of an issue than I had thought as I spent most of my time in the combined kitchen/lounge area getting to know my new Samoan family.



Left - The Neltzers, Lynn (the mother), Charles and Rosemarie, taken in the communal area of the village after a delicious Sunday lunch.



Right - my room, the bedding was probably the least colourful fabric I saw in Samoa, luckily I alternated between this and a lovely bright green one that was much more in keeping with local fashion.



The house where I stayed for 8 weeks. This house is surrounded by houses of other members of the village.

The Neltzers are an amazing family who were very welcoming and friendly, and seemed to know everywhere good to go in Samoa and had friends everywhere. Lynn also owns a local supermarket and her determination was inspiring, especially as a business women in a country with fairly stereotypical gender roles. The older son, Karl, took it upon himself to be my tour guide, which I was extremely grateful for. This included a trip to the other main island for Karl to visit some extended family before exploring the island. We were joined by another medical student. While in Savai'i, we stayed in traditional fales. These were more comfortable than I had expected, and the lack of power meant that your sleep was determined by sunset and sunrise rather than your phone. The fales were lovely, however on our second night there it was very rainy and windy and so I went to sleep worried that my bag/mattress/I would be in the sea on waking up. After two nights I was quite excited to return back to the comfort of my new bed and a working shower, but this was thwarted by the cancellation of the ferries back that day due to the weather. We were slightly concerned that we would end up sleeping in the car but luckily we found two rooms in a motel. The trip to Savai'i was a fantastic opportunity to see more of Samoa, as well as get to know Karl more. It turns out that we share a love of video games, and so this was a major topic of conversation alongside Samoan legends and our respective lives. For the rest of my time there I got to know each member of the family more, and was honoured when they gave me some traditional parting gifts. This consisted of a lavalava (Samoan skirt) and a large wooden fishing hook, symbolising future luck in finding food and in health. I sincerely hope that some of the Neltzers come to the UK in the future so I can extend them the same hospitality and warmth that they showed me.



Left - traditional shared fales on the beach of Savai'i, luckily with a mattress and a mosquito net.



Right - gifts from Lynn, a large wooden traditional fishing hook and a lavalava.

Family is hugely important in Samoa, for instance Father's Day occurred while I was in Samoa and it was a national holiday with family members returning from other countries to spend time with their family. Questions about my family were common, with enquiries about your marriage status and number of children being as common as comments about the weather. National statistics suggest that the average number of children is around 4, however I only met one woman with fewer than 4, with most having at least 6. Being in surgery with C sections, it was not uncommon to see women with upwards of 10 children. Considering how many Samoans emigrate, I was surprised by the family-oriented mentality, but it was refreshing to see and led to more people embracing me as family and inviting me into their homes and lives.

They often say about Samoans that marrying a family means marrying the village, and now I see why. It was rare to be in the house during the day without at least two non-family members there, which was ideal for me in getting to learn more about Samoa and the people there. Due to the strong Christianity in Samoa, Sundays are reserved for going to church, relaxing and family (including the village). Every Sunday lots of the people of the village come together to cook and eat food was invariably delicious, albeit slightly bland. Having gone to a demonstration on traditional cooking, I have a feeling that the typical food eaten has not changed in a long time. It generally consists of taro and breadfruit (very starchy carbohydrates), palusami (coconut cream wrapped in taro leaves) and fresh fish.

Below - meal from the cultural demonstration, eaten on a plate I made earlier from woven coconut leaves.



Right - a local friend climbing a coconut tree as a source of food and to prevent damage caused by unruly falling coconuts.



Anaesthetics

I spent the bulk of my time in Samoa in the TTM hospital in Apia, the capital city. I was in anaesthetics and intensive care (ICU), and so spent most of my time in theatres with the anaesthetic team. There are 4 theatres in the TTM hospital, which is the only hospital with permanent surgical theatres in the country. Unfortunately, one of the theatres has been unusable for the last 6 months as they are missing a small piece of anaesthetics kit. In the hospital there are 6 anaesthetists, 3 seniors and 3 juniors, who all work every day except Sunday and are on call twice a week each. This means they are stretched very thin and so only look after ventilated patients in ICU, whereas ideally they would look after every ICU patient. The anaesthetists were very friendly and welcoming, and so I quickly felt like part of the team. During surgery the anaesthetists did not have a lot to do except monitor the patient, and they were kind enough during this time to teach me a lot about medicine and anaesthetics as well as Samoan life and culture. Two of the anaesthetists were family members of local chiefs, and so they had the traditional Samoan tattoos. We spent a lot of time discussing the importance of the designs and the responsibilities brought about by the family hierarchy. Furthermore, the longer I spent there the more I learned about their lives, backgrounds and families. I even had the chance to meet the family of one of the anaesthetists who I had spent the most time with. One of the saddest parts of my time in Samoa was saying goodbye to the anaesthetists who had helped me so much and who I had gotten to know as mentors and friends.



Left - the anaesthetists who become a family to me: Esjae, Cecelia, L'amour, Dr Yu, Corey, Pesa (left to right).

Below - comments on my time in hospital from the head anaesthetist. The comment about me contributing and helping was incredibly gratifying.

Comments on performance:
It has been a great pleasure having Claire join our anaesthetics/ICU dept for her elective. She has been of great help assisting with surgical patients + their anaesthetics. By the end of her rotation she was able to perform competently bag mask ventilations, airway adjunct insertions, LMA insertions, intubations + IV cannulations. Furthermore she was crucial in collecting data on venous thrombosis over the last 5 years.
On behalf of the anaesthetics dept we thank Claire for her contribution + help but wishes for the remaining of her training
Regards.

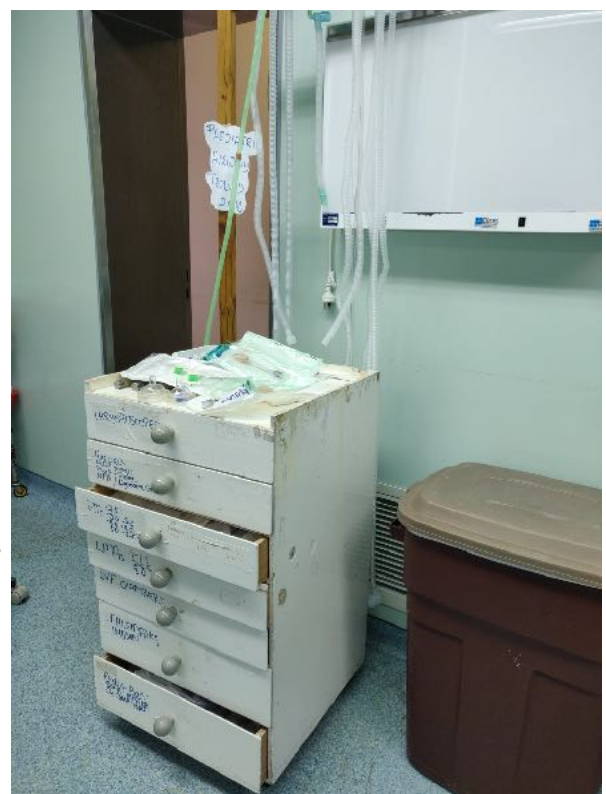
Being in Samoa taught me a lot about medicine, and anaesthetics especially. I was hugely impressed by the wide variety of knowledge of the anaesthetists, including in niche areas of surgery that only occur once a year in Samoa when visiting surgical teams are present. This meant that the teaching they gave me was highly applicable to my future work in the UK as well as in Samoa. I was also given the opportunity to gain more practical experience, for instance in managing airways and giving anaesthetic agents. I feel that this will greatly improve my future practice, and was only possible because I had become a trusted part of the team during my time. While in Samoa, I also undertook an audit on neonatal surgery in the TTM hospital. I spoke to the head anaesthetist about my findings from the audit and some potential changes that could be made which he seemed very keen about. Hopefully this means that my time in Samoa will help them in the long run, giving me a small feeling of giving back to a community who helped me so much. I was expecting to feel pushed out of my comfort zone and unsupported, however I was delighted that this was not the case as I was supported and encouraged at every turn.

The theatre team overall felt like a large community, lacking the sense of hierarchy that is felt in theatres in the UK. I felt that this boosted morale and made theatres a more friendly place to be, encouraging staff to ask questions to gain understanding. This was both in work and out of work, including trips to the local gym to play volleyball together, praying together before teaching and at the morning briefing, and a fortnightly weighing session in the recovery room of the theatre. The weighing session felt very different to that in the UK, which was good in some ways as a non-judgmental team-building exercise, but bad in the sense that most of the theatre staff were overweight or obese and there was little encouragement to lose weight to improve health. Although the staff felt like a big community, almost a family, this did not necessarily extend to patients. I saw some patients clearly upset or in pain and this was rarely addressed by the local staff. Speaking to other medical students across the hospital, I learned that this was not just in theatres, and seemed to be a larger problem elsewhere. It seemed strange to me that the warmth that was extended to me on my first day was not necessarily being given to patients who are more in need of it.

Looking back, I wonder if the attitude towards patients was due to stoicism, which seemed to be a matter of personal and national pride in Samoa. Traditional tattoos, which looked incredibly painful, are performed without any painkillers. For men, these take 12 sessions (12 days with breaks or 6 days without), and stopping before the tattoo is finished is not allowed. The tattoo then symbolises courage and bravery, as these are both necessary traits to have the full tattoo. This stoicism extends to many aspects of life, in good and bad ways. Perseverance allows Samoans to continue collecting food and living normal life even when medically unwell. However, this also means that patients presented very late as they were determined to carry on without help for as long as possible. This meant that procedures were more difficult and outcomes were worse. In addition, the stoicism expected of yourself and others made expressing emotions difficult, and so patients would rarely complain of being anxious or in pain. When patients were crying it was then often ignored, potentially because people would not want to be seen upset and so comforting the patient may make them feel that others perceive them as a coward or unable to cope. I found this difficult when, as a country, we are moving more towards openly expressing emotions without judgement. I see the benefits of the stoic nature in the current

environment but wonder if it will be as prevalent in the future as gathering food and cooking become less labour-intensive and more achievable by individuals even when unwell.

I was expecting there to be a big problem in healthcare in Samoa with the lack of resources. On the whole this was less of an issue than I had expected. Due to international aid, primarily from China and Japan, the surgical theatres looked similar to those in the UK and lack of equipment was rarely a problem. It was interesting to see the contrast between what was affordable through aid compared to through government money. This could be seen in the difference in equipment as well as the difficulty in upkeep and maintaining the hospital. There are sufficient funds to keep the hospital air-conditioned and fairly well stocked, however most days at least one type of routine blood test was unavailable, and large-scale repairs did not happen. As mentioned before, this led to one out of four theatres not running due to one piece of equipment, and so there was a very new theatre that was out of action. The theatres seemed to be a high priority in terms of funding, and so I noticed the lack of resources less than other medical students in other parts of the hospital. In addition, during the frequent and sometimes lengthy powercuts, the theatres received electricity from the generators unlike much of the rest of the hospital. This makes sense for patient safety, as these are the patients most dependent on electricity. Moreover, occasionally a piece of disposable equipment would be used on a patient for the anaesthetist to then realise that it was the last one in the hospital, meaning that other equipment would have to be adapted for use in future patients. This showed to me a small aspect of a much larger problem throughout the country, one that makes me feel almost guilty coming back to medicine in the UK and using resources without truly considering the cost.

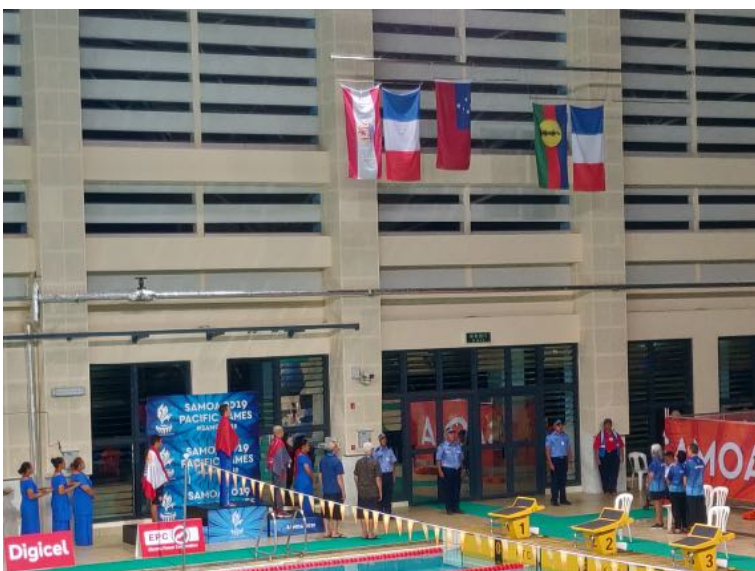


The difference between anaesthetic trolleys bought through aid (left) and Samoan government (right).

Tourism

The Pacific Games were hosted in Samoa for 2 weeks while I was there. It was a fantastic opportunity to watch sports on an international level as well as experience opening and closing ceremonies celebrating Samoan music, dance and history. The ceremonies included over 2,000 Samoans, mostly school age, with huge choreographed traditional dance in colourful dress. Going in to the opening ceremony I was not expecting greatness due to the lack of resources and time, as the 2019 Games were supposed to be held in Tonga with Samoa stepping in in 2018 when Tonga pulled out. I was amazed by the huge scale of the event and the talent that went into planning and practicing for the event. Considering most of the volunteers in the event were in school 6 days a week I am still not sure how they managed to achieve such an impressive display, but I am glad they did. The closing ceremony ended with traditional firedancing with around 40 of the most experienced Samoans partaking. Throughout the ceremonies there were representations of how Polynesia was founded and the history of the islands. This meant that the spectacle was not only amazing to watch, but also informative.

During the Pacific Games I watched many of the sports in my evenings off. I was surprised by the variety in the numbers of spectators, with rugby overfilling a stadium while I was the only non-volunteer spectator at table tennis. I spent a lot of time at the squash and ended up getting to know a lot of the squash players from Samoa and other Pacific Islands. Because of this, one of the Samoan squash players gave me her lunch just before her gold medal match. This was very much appreciated and also delicious! Due to the low numbers of spectators and the fact that most Caucasians in Samoa at the time were athletes, I was often mistaken for an athlete despite my inability to play most sports, which I found quite amusing. I was also able to join a social paddle along with another medical student with a local Va'a (outrigger canoeing) club. This was much harder work than I had anticipated, especially as I was put in one of the powerhouse positions! We canoed for over 10km, which was a great workout as well as an opportunity to talk to some locals. We spent a long time discussing the current situation with international aid as many of the waterfront properties are thanks to aid from China and Japan. It was interesting to hear from affected people how different forms of aid work, with some countries building what a country needs and others building what a country wants. The latter sounds like a good idea, however it means that Samoa now has an unused state-of-the-art aquatic centre despite most roads lacking pavements.



Samoa's first ever gold medal in swimming. The crowd (myself included) went completely mad.



Outrigger canoeing with a local team. I was supposed to be the powerhouse but I don't think this happened!

Another aspect of the Games that impressed me was their dedication to minimise the impact on the environment. For instance, there were speeches in the ceremonies about the impact of climate change on the Pacific Islands and ways to reduce emissions as well as a complete ban on plastic at the Games. Considering the commitment shown by a country with low resources and a fairly low carbon footprint, I felt almost embarrassed to come from a country that was contributing considerably more to the problem and was not using as much of its resource to tackle the problem.

Tourism is the second largest industry in Samoa, following money sent to Samoa by family living abroad. I discovered that most of the tourism spots are owned by locals, as is most of the country, and so they charge for entry because you are gaining access to their land and the tourism spot happens to be there. Most places were very cheap to visit, however there seemed to be little business sense in terms of how much to charge. For example, most waterfalls were \$5WST (about £1.30), however some were \$10WST or \$20WST, and the more expensive places did not seem to realise that the increased costs would drive tourists away and so they would end up with less money overall. On the other hand, this may have been because they felt that their waterfalls were worth more and so charging less would have been disrespectful to their land. In addition, minimum wage in Samoa is \$2.30WST, (about 80p) with costs being only slightly less than in the UK, and so it may be that any money was helpful. The low minimum wage did make me feel guilty when going to restaurants or using taxis as I felt that I could afford to pay more to improve the quality of life of the low income workers. Maybe this is taking a Western view of the situation if money is not of importance, with most families owning their homes and growing their own food, although unions are pushing to increase the minimum wage which suggests this is not the case. Businesses are also trying to adjust to the mild Westernisation of Samoa, for instance most have facebook pages but do not have websites or tripadvisor. WiFi is also very expensive and slow, but data is very widespread and efficient. I found it interesting to see which aspects of Western society were being integrated into the Samoan lifestyle and which weren't. I was glad to see that the emphasis on efficiency and deadlines were not present, instead the lifestyle is relaxed. In most cases this is a good thing as there is a focus on living well, which is likely good for mental health, however in some cases more efficiency would have been appreciated, especially in the healthcare setting. In general I think a compromise between the time-pressured nature of the UK and the (at times overly) relaxed nature of Samoa would give a better balance between mental health and efficiency.

Overall I had a fantastic time in Samoa. While the country was absolutely stunning, the best part was getting to know the locals and becoming part of a number of communities. I have returned to the UK with thoughts on how I can live my life with a mixture of UK and Samoan ideals when looking at family, time and the environment. It was a hugely rewarding 8 weeks, and I am so grateful for everyone in Samoa and in the UK who was involved. Thank you so much to the GIFT Trust for helping me fund a trip that gave me the opportunity to experience life in Samoa and make friendships I will never forget. The Neltzers will always be family to me, and the anaesthetists will remain mentors and friends long after I graduate and get to use the lessons they taught me.