

Frances Cameron's report of her experiences in Tonga as part of the Mathew Peck Travelling Scholarship - 2011

On the 25th of February 2011 I set off to spend six weeks in Tonga on the Mathew Peck Travelling Scholarship. This scholarship is designed to provide a Monash pharmacy student with experience, insight and education on how pharmacists can be involved in making a contribution towards improving health services in developing countries. It enables recipients to develop contacts, experience and an increased understanding of international health situations that places them in a strong position for future involvement.

With less than two months experience as an intern pharmacist, it would have been unrealistic to expect to possess the skills and knowledge required to implement successful, sustainable changes. Instead I departed for Tonga aiming to return with a greater awareness and understanding of what work in developing countries can entail. I plan to use this knowledge for continued involvement in the future after I have gained more clinical experience and completed a Master's in Public Health.

For my six weeks I was based at Vaiola Hospital, the main hospital in Tonga. I had an extremely varied, interesting time and gained an amazing insight into the diverse range of duties pharmacists can perform in Tonga and other developing countries.

I was fortunate enough to be sharing a house with four Australian Youth Ambassadors for Development (AYAD) volunteers, one of whom was an exceptional pharmacist, Sarah Smith. Sarah was nearing the end of her yearlong assignment and consequently was able to share with me a considerable amount of information on the satisfying, challenging and frustrating experiences she had encountered. This provided valuable insight into what a longer term period working in a developing country can entail. Six weeks is a good appetiser, but not long enough to get a realistic grasp on the versatility, endurance and stamina that can be required to work productively in this environment long term.

In a six week timeframe challenges seem very manageable, in fact they often add to the adventure and I considered them part of a well rounded experience. I embraced the unpredictable functioning of electrical equipment and interruptions to gas and water supplies at home. I shared my bed with the occasional rat, spider and cockroach. I even enjoyed getting thoroughly drenched every now and then on my ride to or from the hospital and arriving a dishevelled mess. Granted, the frequent lack of internet did get frustrating at times, particularly when it interfered with work, but it taught me to be more resourceful and flexible.

During my time at Vaiola I planned to complete a drug usage evaluation (DUE) audit on acute post-operative pain management (APOP) to assess current management in Tonga, with the aim of informing future practice. Unfortunately a highly skilled surgeon at Vaiola Hospital had recently retired, so I was unable to obtain sufficient patients for my study. I decided to conduct an audit on venous thromboembolism (VTE) prophylaxis instead. The audit was designed to determine current practice in risk assessment, documentation and provision of prophylaxis for VTE in medical patients at Vaiola Hospital, again with the aim of informing future practice.

None of the patients audited had a documented risk assessment for developing VTE. In addition prophylaxis was not provided to any of the patients in the study despite 83% having at least one moderate risk factor and only ten percent having contraindications to chemoprophylaxis. Sixty percent of the patients were elderly, 17% were obese, 13% were immobile and 27% were suffering from chest infections.

One of the arguments for limiting availability of Low Molecular Weight Heparin (LMWH) at the hospital was cost. Provision of medical prophylaxis would be an additional cost to the hospital, however not only would it optimise patient care and decrease morbidity and mortality, it would also decrease hospital re-admissions due to VTE related events, decreasing the strain on the health care system. Currently heparin is available but not being used, so possibly LMWH should not be kept until practice has changed and heparin is being prescribed routinely when appropriate.

From the findings of the audit, it was recommended that a standardised risk assessment form for VTE be designed and routinely filled out for all patients on admission to aid selection of appropriate, individualised VTE prophylaxis and improve patient care and clinical outcomes at Vaiola Hospital. It was also recommended that guidelines on the use of the form be designed and education sessions for health care providers routinely conducted to assist in the success of this intervention.

I collected data on the wards for my audit, and encouraged one of the pharmacists to come with me. There are only two pharmacists at the hospital and currently they do not attend to wards. The doctors seem eager to have them on board, and although one of the pharmacists seemed interested, she was still very hesitant to actually get on the wards. Helping with my data collection served as a gentle introduction and she seemed excited to be there. I hope she will take a more active role on the wards in the future.

Another major project for the pharmacy while I was there was World Health Day. This year the theme was “combating antimicrobial resistance”, so the pharmacy was very involved. I helped make pamphlets and posters, and gave presentations to nursing students on antimicrobial resistance which were well received. The main messages we tried to convey were that antibiotics will not help for colds or the flu and the importance of not sharing antibiotics. Many people send their medications to overseas relatives as they can obtain them free of charge from the hospital; we tried to discourage this also.

Aside from the projects, I attempted to get the broadest exposure possible while in Tonga. I observed a couple of lectures the AYAD pharmacist gave to the pharmacy technician students, and later on presented one. I helped manufacture 10 litres of chlorhexidine cream for the obstetrics ward and watched a caesarean section. I pre-packed in outpatients and was horrified when asked to pre-pack aspirin from enormous tins. It was strongly drummed into us at university that aspirin degrades extremely quickly once exposed to the environment, considering the heat and humidity in Tonga we might as well have been giving out placebos. The next instalment of aspirin is coming in strip packaging.

It was very interesting to attend Tongan Medical Association, Pharmacy Board and Infectious Disease Control meetings, all of which were opened and closed by prayer. Infection control is a very important issue, especially with the increasing prevalence of antimicrobial drug resistance. Tonga has only had a couple of cases of MRSA, both of which were from international patients and luckily were contained. Their hand washing practices are also more advanced than in many developing countries, antiseptic pump soaps and paper towels were introduced a few years ago. The Infection Control Nurse proudly informed me that in most of the other developing countries they are still using bars of soap and a handtowel.

While on the wards I attended a couple of rounds. There were some extremely sad cases on the paediatric ward; one example was an 18 month old who was there because her parents had run out of her carbamazepine two weeks earlier. They did not bother to get more, despite the fact that medications are provided free of charge from the hospital. She had gone into status epilepticus and fitted for over an hour and a half before they got her to hospital and received considerable brain damage. If this wasn't bad enough, it had happened previously!

Another tiny 33 week preterm baby was in hospital due to gastrointestinal complications. It had already undergone two abdominal operations and was starved for a week as due to the surgery they were unable to feed it orally and they do not have any parenteral nutrition in Tonga. When I was there they were feeding it by the cupping method, which was very intriguing to watch. The feed is put into medicine cups and held it under the babies' mouths, they then lap it up. This method is used as the sterilisation facilities are not available to ensure bottle teats are safe. Not only was this baby malnourished, the wound on its stomach was leaking acid causing a severe chemical burn to the surrounding skin. I suggested a barrier cream to help protect its skin but they did not stock anything so I purchased some from the community pharmacy.

The morning I spent in the diabetes clinic was eye opening. Excruciatingly painful debridements of diabetic ulcers were performed without any analgesics or anaesthetics whatsoever. Diabetes is a considerable problem in Tonga. Retaining patients is also very difficult. The nurse at the clinic explained to me that most of their patients do not attend until they have left it so long that they require amputations, after that they tend to take it more seriously. A study was conducted to investigate what might be causing this, and the vast majority stated "personal reasons". This made it very hard to try and implement strategies to increase attendance.

Beverly Snell provided me with some diabetes posters to take to Tonga. I got these translated and set up window displays in the diabetes clinic and outpatients which were received with enthusiasm. I was pleased to observe patients reading them during their long waits.

Nearly all patients get their medications from the hospital as they are provided free of charge. Patients who can afford to purchase them may choose to go to a community

pharmacy if they do not want to spend the day outside outpatients. There are also some drugs that cannot be obtained from the hospital, for example statins are not funded, so if patients desire to be on these medications they must purchase them from a community pharmacy.

I spent an afternoon working in a community pharmacy with a young pharmacist from New Zealand who had just started volunteering there. The last pharmacist had left some months ago and there had been no replacement, so assistants had been running the store. It was in a rather poor state when he arrived and he had been busy organising supplies. I visited the pharmacy again before I left and it was remarkable to see the improvements he had made.

It was very fortuitous that my trip coincided with a series of supervisory visits to collect data for a medications usage survey. The Standard Treatment Guidelines are currently under revision so input and feedback from the users was being sought. I participated in the supervisory visits to hospitals on three of the beautiful outer islands including the Prince Ngu Hospital in Vava'u, the Niu'ui Hospital in Ha'apai and the Niu'eiki Hospital in 'Eua. It was interesting to see how these remote hospitals were set up. Aside from collecting data we also sorted through stock, disposed of vast amounts of expired stock and ordered replacements. It was a terrible shame to see such wastage when resources were so limited. Some of the expired stock was donated but most of the problem was mismanagement of ordering and usage. Drug donation is a problematic issue in many developing countries. Tonga has recently written a policy for drug donation as they have been receiving drugs that are expired or not on their EDL. This wastes time, space and resources as they then need to arrange for storage and destruction of these products.

Occasionally during my visit I felt slightly less industrious than usual, despite putting in a great deal of effort. This could be frustrating, but once I reminded myself that things worked differently and adjusted, I found work much more rewarding. Having an hour long chat with the pharmacist when you have a lot of work to get done can seem like a pleasant hold up. When she then asks the nurses a couple of questions in Tongan, which results in the medical charts you would have struggled to locate being handed to you, then introduces you to some doctors who invite you on a ward round, that hour of chat becomes an extremely good use of your time.

Getting simple things done sometimes involved a decent battle due to internet issues, viruses, printer breakdowns, being on the wrong side when the door was locked for lunchtime naps... This got tiring at times, particularly when it was 32 degrees with extreme humidity (one day a pharmacist fainted it was that hot) but you felt an amazing sense of accomplishment when you finally completed your tasks.

My six weeks went incredibly quickly, and soon I was leaving. The AYAD pharmacists were also leaving so the hospital put on an amazing Tongan feast as a goodbye lunch for us. There were a lot of touching, heartfelt speeches which left very few dry eyes. The celebration was brought to an end with a hauntingly beautiful farewell hymn. I was sad to be leaving all the lovely new people I met, but very grateful for the amazingly kind and generous new friends I made who were so welcoming and helpful from the day I arrived.

There were a few adjustments to make upon my return as well. It was a bit of a shock that lunch time no longer involved a nap, thongs were not acceptable at the hospital and ironing was no longer optional. What was slightly harder to readjust back to was the emphasis on consumerism that is so ingrained into our society. I felt slightly detached when people complained about what really were rather trivial matters.

Something that really struck me while I was away was the absence of begging and hassling. Although many people were living below the poverty line, I did not see the desperation that I have experienced when visiting other developing countries. In fact, more people hassle me in Melbourne. The people appeared quite content and accepting of their situation. There was a lovely sense of community and people helped each other out. Sharing was an integral part of their culture and it was refreshing to see. If someone brought lunch to work, they would share it with everyone. Sarah did warn me however to be alert when complimenting people. I was careful to only make general statements like “you look lovely” after she informed me her comment of “what a beautiful skirt” had resulted in the skirt being presented to her the following day.

As I reflect back on my time in Tonga I feel very privileged to have had this wonderful experience. One of the great things about this scholarship is the support that the recipients are provided with. I was mentored by Beverly Snell, Jean Spinks and Gregory Duncan, who are all heavily involved with international health. I am extremely grateful to them for their valuable advice and guidance. Marion Robertson, the DUE pharmacist at the Royal Melbourne hospital was of great assistance with my DUE. Sarah Smith, the AYAD pharmacist, was a constant source of encouragement and I could not have asked for a more inspirational role model.

In addition, I would also like to thank the Remedy group from Monash University, for their donations which were greatly appreciated by the staff at Vaiola hospital, and the Therapeutic Guidelines for their donation of books.

Finally, I would like to thank the Peck family. I have a strong interest in working in developing countries and this scholarship served as a wonderful introduction to the setting. It reaffirmed my conviction that pharmacists can and should be involved in contributing towards making improvements in health care for developing countries.

It was an honour and a privilege to be a recipient.

Frances Cameron

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