

Renal Association Elective Bursary Report

Deborah Aldridge – St George's, University of London

As part of my elective, I was lucky enough to spend three weeks at Port Vila Central Hospital in Vanuatu, which is a country made up of over eighty islands in the South Pacific Ocean. Despite being an economically developing nation, its inhabitants are unusual for displaying a high number of conditions more commonly seen in the economically developed world. Non-communicable diseases make up 70% of all deaths in the country¹, with 75% of patient visits to the hospital's outpatient department each day being non-communicable disease related². Vanuatu also ranks sixth worldwide for diabetes prevalence (21% of the adult population³) and has a high level of raised blood pressure (estimated 41.8% prevalence¹). Both of these conditions are risk factors for the development of chronic kidney disease⁴.

Port Vila is Vanuatu's capital and is situated on the island of Efate. Its hospital is the country's largest, containing four busy wards and a bustling outpatient department. I spent three weeks on the medical ward and in the daily non-communicable disease clinics to gain an understanding of the challenges facing the diagnosis and management of chronic kidney disease in Vanuatu.

One of the main challenges is a lack of resources. For example, in theory, the hospital aims to do urine dipstick analysis and creatinine testing on every patient with a new hypertension or diabetes diagnosis. They are then monitored according to the severity of their condition, which for most patients is twice yearly. However, due to a lack of staff and material resources, in practice chronic kidney disease screening and monitoring is often sporadic. The daily non-communicable disease clinic is very oversubscribed and is run by several nurses. Due to time constraints, the primary focus is on blood pressure and sugar readings, as well as medication compliance. Complications are not always spoken about, but when they are, concentrate on retinopathy and peripheral neuropathy rather than nephropathy. The nurses also reported that they are unable to sign blood bottles, meaning that patient's creatinine levels are often not tested unless the patient attends the once-a-week doctor led clinic.

Vanuatu's management of chronic kidney disease mainly focuses on disease progression. Once a patient has progressed to End Stage Kidney Disease, there are no options for dialysis or kidney transplantation due to a lack of resources.

Treatment compliance is also a problem. Unless patients have the means to go to a private vendor, medication is only available from the hospital pharmacist. This means that it is hard for patients living outside of the main town to keep up with treatment. I frequently saw patients who could only pick up their treatment when they managed to get transport or when someone they knew was going to town, which meant that they often went weeks without medication once their supply ran out.

Compliance is also a challenge due to the strength of traditional health beliefs. In the clinic, patients often object to taking daily medication because they currently feel well and therefore prefer to use traditional medicine instead. They then do not return to the hospital until they start experiencing complications, which are often by that stage irreversible.

Living in Port Vila, also enabled me to see the type of food that people eat. While working in the hospital, I regularly saw posters campaigning to return to an "island diet" of fresh fruit, vegetables, meat and fish. However, the supermarkets are stocked with large amounts of canned goods, such as spam and convenience foods. I spoke first hand to patients in clinics, who despite being given guidance books on what foods are best to eat, were still confused as to what a healthy "island diet" is. Given that an unhealthy diet is a risk factor for conditions such as

hypertension and diabetes, which are in turn risk factors for chronic kidney disease⁴, this knowledge gap is another major challenge. Vanuatu also has high rates of obesity (27.5% estimated prevalence in 2008¹), which is a risk factor for hypertension and diabetes. Although I saw a large amount of publicity focused on changing these views within the hospital, the material is not widespread outside.

My experience in Vanuatu was a privilege and I was continuously impressed at how tirelessly and enthusiastically the health professionals worked. I would also like to take the opportunity to thank the Renal Association for their support. Not only did it enable me to learn about and appreciate the complexity of the challenges facing Vanuatu's diagnosis and management of chronic kidney disease, but it also enabled me to meet some fantastic people from different backgrounds to my own and to develop my interest in renal medicine.

References:

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- (3) Vanuatu Daily Post. *Diabetic Nation*. Available from: http://dailypost.vu/news/diabetic-nation/article_2280db55-d513-5c34-bc04-af6ea972c99a.html [Accessed 17 July 2016].
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