

M*A*S*H and malaria: the career resonance of a BJHM elective in 1993

The next casualty was wheeled into the anaesthetic room for us to assess. He had a broken arrow stuck in his face, just missing his eye and lodged pointing towards the brain. An X-ray suggested it stopped somewhere short of the pituitary and we decided to ease it out, and give him some antibiotics. We did not think anyone else in the country would have any better ideas. This was the highlands of Papua New Guinea in 1993 in a remote Adventist mission hospital where tribal fighting was commonplace. I still have that broken arrow.

Twenty-three years ago the *British Journal of Hospital Medicine* gave me a travel grant for an elective in Papua New Guinea and the experience has resonated through my subsequent professional life. In the journal's 50th anniversary year I thought it worth taking retrospective stock on the value of the elective period in medical education. In the 1990s the elective at Edinburgh University was 14 weeks long, a suitable time to get stuck into medicine in a different culture. But to organize an elective on the other side of the world before the internet and email meant sending off hopeful letters to mostly random hospitals and waiting weeks or months for some sort of reply with exotic stamps on.

I set off clutching those replies to two hospitals, one in the tribal highlands and one on the eastern Pacific tip of Papua New Guinea. I had a plan to do a project on self-medicating for malaria, armed with a chemical which could detect chloroquine excreted in the urine. What I had not found out beforehand was that my mission hospital in Wabag was at too high an altitude to have any malaria. Nevertheless it was packed with pathology, a lot of it inflicted in tribal battles, pay back and by local healers who performed thoracotomies for chest complaints and

injuries (Beare and Watts, 1995). There were two doctors and we spent a lot of time in theatre receiving casualties, reminiscent of M*A*S*H episodes. This was when I decided I enjoyed the focused practical teamwork of an operating theatre. The surgical speciality I ended up in is not as bloody, but I still have to repair occasional trauma cases. I do like the fact that, unlike other surgical specialities, ophthalmology includes the entire medical care for its particular organ as well.

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I managed to complete my malaria project among the palm trees and Pacific islands off the eastern tip of Papua New Guinea where malaria was common. I spent a couple of weeks on a 'health boat' with a doctor treating people on small outlying islands and collecting patients who needed surgery at the base hospital. Life was and still is hard for these people despite the idyllic Pacific island setting of their homes, and they had very limited access to health care. I managed to develop malaria even with prophylaxis (obviously inadequate because of resistance to chloroquine) and suffered firsthand the illness, the queasiness of quinine treatment and seasickness combined.

Five or six years later, after senior house officer posts in ophthalmology, I found myself on a plane to Malawi to join a research project investigating malarial retinopathy. This was more by luck than design, but luck is about being ready to seize opportunities when they come along. The retinal changes of severe malaria in children consumed a lot of my registrar training with 3 years in Malawi and time spent writing up an MD. This was very different from surgery – this was using the eye, and specifically the retina, as a window onto a systemic killer disease.

My time in Papua New Guinea had sowed the seed of desire to work overseas in a resource-poor setting.

Knowledge of malarial retinopathy has had a big impact on our understanding of how severe malaria causes coma and death, and as a result funduscopy is included in the World Health Organization (2013) guidelines for severe malaria. Not only that, but fundus pictures of malarial retinopathy are now included in many major textbooks of medicine, as when severe it is a strong predictor of death in children with cerebral malaria. I am still involved with ongoing research on malaria retinopathy emanating from Malawi; however, my research group has also branched into diabetic retinopathy in Malawi. Diabetes is rapidly becoming a significant health problem in sub-Saharan Africa, such is the march of non-communicable disease in low and middle income countries.

Unfortunately the mission hospital in the highlands of Papua New Guinea had not fared well. When it did occur to me that I could search for it on the internet I discovered it had been closed in 2000 after 2 years of tribal fighting around and inside it. Bow and arrows and axes had escalated to semi-automatic weapons and it was no longer safe. Whereas when I had been there it had been considered a safe haven, the hospital had become a site for the fighting after someone was killed just outside its perimeter.

I still use skills learnt in Papua New Guinea when suturing (on a smaller scale), draining an abscess or in a temporal artery biopsy, but an elective is about more than acquiring skills, it is about developing an adventurous and outward-looking state of mind. Some things are more important than the creature comforts and the easy path. **BJHM**

Conflict of interest: none.

Beare N, Watts J (1995) Ten cases of bush thoracotomy in Enga Province, Papua New Guinea. *Papua New Guinea Medical Journal* 38(3): 65–9

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