Sight-seeing in the Solomon Islands

Michelle L Baker

The Solomon Islands is a nation of warm people, tropical islands, shipwrecks and malaria. It is also a nation in urgent need of specialised medical care.

This is the story of my short time volunteering in the Solomon Islands for the ophthalmic division of the Royal Australasian College of Surgeons, Pacific Islands Project (PIP) in 2004. The PIP, in operation since 1996, is funded by the Australian Agency for International Development (AusAID) and encompasses specialists from 10 surgical specialties who volunteer their time to help address the shortage of local specialists in 11 Pacific Island countries. The ophthalmic team for the Solomon Islands is sponsored to make an annual trip. Eye disease is such a serious problem that they made a second trip in 2004 to the islands of Guadalcanal, Malaita and Gizo, their 11th since the project's inception

The Solomon Islands, formerly known as the British Solomon Islands, gained independence in 1978. They were the scene of some of the bloodiest land, sea and air battles of World War II, and are now emerging from 6 years of ethnic conflict. The predominantly Melanesian people of the Solomon Islands are among the poorest in the South Pacific.[1]

Honiara is a 3-hour flight from Brisbane, where I first met the PIP team — ophthalmologists Geoff Painter and Jeremy Smith, and ophthalmic nurses Bev Baily and Louise Fowler, all from Sydney — at the Solomon Island Airlines check-in counter.

Honiara, Guadalcanal

After arriving at Honiara-Henderson airstrip, we bounced and weaved along dilapidated roads to make our way to the National Referral Hospital in dusty Honiara. It is the only hospital in the archipelago that has an anaesthetist and the option of performing major surgery. However, it has no intensive care facilities and endures a chronic shortage of medical supplies.

The team arrived to the sounds of an animated Christian preacher engaging the crowd of more than 500 patients on the hospital verandah. The patients had been queuing since dawn and many had walked for days on hearing of the impending arrival of an eye team.

Essential to ophthalmic care in the Solomon Islands are the specialised eye nurses, headed by Wanta Aluta. Sister Wanta runs the eye clinic at the National Referral Hospital, provides training for the eye nurses at regional eye clinics, and is responsible for the essential triage before each overseas team visits. Dr Qalo, a Solomon Islander, is currently in an ophthalmology training program in Papua New Guinea, sponsored by Foresight Australia.

At the clinic, the patients were lined up in rows and the two ophthalmologists moved along the rows using a portable slit lamp to diagnose the ophthalmic condition, most commonly, cataract. Patients had brought their own medical histories, which varied from a small exercise book to a scrap of card. Patients were put on the list for cataract surgery if their visual acuity was measured at less than 6/60. However, many could only discern hand movements and up to 30% were profoundly bilaterally blind. Only a select few with pressing reasons for securing surgery (such as driving a taxi or working as a teacher) were operated on at 6/60. Standard cataract surgery was extracapsular cataract extraction with the insertion of a posterior chamber intraocular lens. In most patients, the density of the cataract made phacoemulsification, and thus, modern small-incision cataract surgery, unsuitable.

There were a significant number of young people with cataracts. One unforgettable patient was a 14-year-old boy with bilateral cataract who had lived most of his life being led around by his mother. His left cataract was removed during the team's last PIP tour, and he now had uncorrected 6/4 vision in his left eye, a big smile, and was ready to have his right cataract removed. The severity of eye conditions is compounded by the delay in presentation. Most patients' first port of call is a traditional healer for topical application of herbs termed "Kastom medicine", which, at best, does nothing, and often introduces infection.

Auki, Malaita

After 2 days in Honiara, Dr Painter and I joined Dr Qalo and Sister Wanta for a 3-hour speedboat trip to Malaita Province. No ophthalmic team had visited Malaita since 2001. We went straight from the port to the eye clinic at Kiluufi Hospital to begin consultations with the 112 patients. We greatly appreciated that Stephen, the Malaitan eye nurse, had measured the visual acuity and divided the group into cataracts and other disorders (mostly pterygium and infections). A disturbing number of children had lime burns on their corneas caused by touching lime hydroxide used by their parents in the preparation of their betel nut mixture. Many elderly patients had decreased visual acuity because of uncorrected refractive errors, for which there were no spectacles available.

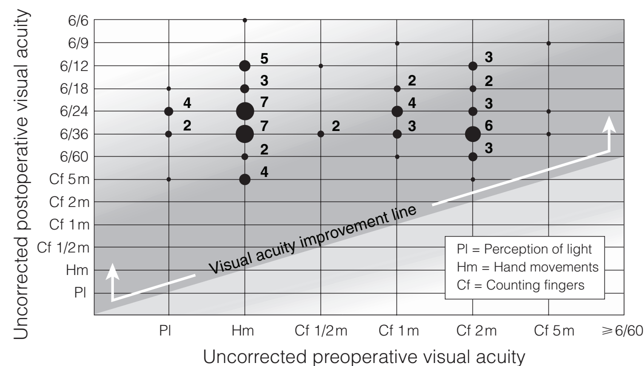
The general state of patients in Malaita was sobering. They were literally in rags. Worse still, many were hungry. Families generally subsist on vegetable plots with little cash income. Some had made the long journey to the eye clinic by canoe or on foot with scarce provisions over many days. One patient even had a hypoglycaemic attack on arrival at the clinic.

Malaita is one of the poorest islands in the country because of its direct involvement in the ethnic conflict. After years of tension, the civil war came to a head on the main island of Guadalcanal in 1998. During the conflict, Malaitan settlers (many second-generation) fled Honiara and went back to Malaita.

The impressive organisation at Kiluufi Hospital enabled us to commence surgery on the second day. The team was mostly self-sufficient, bringing two portable microscopes, ophthalmic instruments, an autoclave and disposables with them. Patients were given a peribulbar local anaesthetic by a Solomon Islander resident medical officer, and walked in and out of surgery. Insect repellant was a must to ward off malaria-laden mosquitoes from our exposed legs. The air-conditioned theatre made operating in the humid

Royal Melbourne Hospital, Melbourne, VIC.
Michelle L Baker, MB BS, Resident Medical Officer.
Reprints will not be available from the author. Correspondence: Dr Michelle L Baker, michellelouisebaker@yahoo.com

1 Improvement in uncorrected visual acuity for 72 patients after extracapsular cataract surgery at Kiluufi Hospital, Malaita, Solomon Islands*



* Vision tested preoperatively and one day postoperatively.
Symbols and adjacent numbers indicate the number of patients with preoperative visual acuity as indicated by their position along the horizontal axis that improved postoperatively to the position shown on the vertical axis. The smallest symbols indicate one patient and are not labelled.

climate tolerable to us, but the patients needed blankets during the half-hour cataract procedure.

After their surgery, the patients were led out to rest until review the next morning. Many slept on vacant benches, under desks or on straw mats on the floor. The pharmacy had no paracetamol for postoperative analgesia. Despite the environmental conditions, the rate of nosocomial infections and endophthalmitis was low.

Each morning, I reviewed the postoperative patients and re-measured their visual acuity. Patients, many of whom were seeing for the first time in many years, were intensely grateful and said “Thank you for coming to Malaita”.

Patients’ uncorrected visual acuity was tested preoperatively and then one day postoperatively (Box 1). Ideally, visual acuity would be tested again a few months later, but patients’ return to their far-flung homes after treatment makes long-term follow-up unrealistic.

While we were working in Auki, Dr Smith and Dr John Szetu (who joined our Team from Vanuatu) worked diligently in Honiara performing a large number of procedures on the Guadalcanal patients we had triaged on arrival. They also introduced more modern technology in the form of phacoemulsification and posterior segment vitrectomy for treating retinal detachment, for the first time to the Solomon Islands.

Gizo

The third place on the PIP schedule was the beautiful island of Gizo, renowned worldwide as a diving Mecca. The team reunited, which increased surgical efficiency and enabled us to perform a record number of operations overall.

Reflections

We completed 287 procedures in 2 weeks (Box 2), and provided valuable supplies and teaching. Despite this, time constraints meant that we were not able to extract all of the cataracts of the patients on the surgical list in Honiara or Auki. This left me feeling despondent, as the patients had waited so patiently for up to a week and were so gracefully resigned in their disappointment. Of course, they will be given priority in the future, but the sadness on their faces was obvious.

2 Presentations and surgery for eye disorders in the Solomon Islands during a 2-week visit by a Pacific Islands Project ophthalmic team in August 2004

		Surgery			
Hospital	Patients screened	Cataract	Pterygium (excision/graft)	Entropion (repair)	Diabetic retinopathy (laser)
National Referral Hospital	344	151	2	2	4
Kiluufi Hospital	112	72	1	1	na
Gizo Hospital	124	38	10	6	na
Total	580	261	13	9	4

na = not applicable.

I obtained invaluable experience on neglected ophthalmic disorders and the difficult conditions under which the Solomon Islander nurses and doctors work. It was a privilege to witness the work in the Solomon Islands by the PIP team, but especially the work done by Sister Wanta and her nurses.

I now understand and appreciate how Australian development projects are assisting in the development of primary eye care in the Pacific Nations. Sadly, compared with their Pacific neighbours, the Solomon Islands are relatively well resourced. The PIP teams provided ophthalmic surgery, in addition to valuable supplies and teaching; VISION 2020 provided specialised training for eye nurses, who in turn provided a buffer of sustainable eye care during the ethnic conflict; and Foresight Australia provide the opportunity for specialised ophthalmic training.

On a broader front, additional assistance is provided by the Regional Assistance Mission to the Solomon Islands (RAMSI), established by Australia and with other Pacific Island Nations at the request of the Solomon Islands government in 2003. RAMSI has authority for peacekeeping and the restoration of basic services, particularly in health. This has been broadly welcomed by most Solomon Islanders.[2]

The Solomon Islanders have been through difficult times, but their future is looking brighter.

Acknowledgements

I thank Josef Oduwo for the title, Geoffrey Painter, Richard Le Mesurier and Phillippa Connelly for editorial input, Ted Jones from AusAID for on-the-ground support, David Ford for donating medicine, and Steven Baker for the graphics.

References

1 Central Intelligence Agency. Washington: the world factbook. Available at: http://www.cia.gov/cia/publications/factbook/geos/bp.html [updated 2004 December 16; cited 2004 October 23] (accessed May 2005).
2 Australian Government Department of Foreign Affairs and Trade. Available at: http://www.dfat.gov.au/geo/solomon_islands [updated 2005 January 14; cited 2004 October 23] (accessed May 2005).

(Received 25 Jan 2005, accepted 20 May 2005) ❑