

Mending the road behind and building the road ahead—the journey of a rural generalist in Papua New Guinea

David Mills

Kompiani District Hospital, PNG

PNG is of course Australia's nearest neighbour and former territory. It's a country of nearly 8 million people in 2015, 87% of whom, according to official statistics, live in either rural or remote locations.

The country is divided into 88 administrative units (districts) plus the National Capital district. The average population of a district is 80,000 people. In 2015 only 39 of those districts have doctors resident full time, with at least 3.5 million people without access to even one doctor in their electoral boundary.

To make matters more difficult, the population live spread out across the remote mountains, along the numerous large rivers, or on far flung outlying islands that dot the Bismark, Solomon and Coral Seas. Logistics are poor to non-existent in many areas making access to health services very difficult.

PNG has one medical school – the School of Medicine and Health Sciences at the University of PNG in Port Moresby. I currently trains 45 students for PNG each year with up to 5 more from Solomon Islands. These numbers have been fairly static for the last 2 decades. It is estimated that PNG needs to train at least 300 doctors per year in order to reach an “acceptable” doctor to patient ratio for a developing nation.

Of the doctors who graduate the 5 years undergrad training at SMHS and subsequent 2 year residency, the very large majority seek speciality training (in PNG these are known as the Masters of Medicine (MMED) training programs). This has led to a concentration of the medical workforce in the major towns, where the minority of PNG's population live.

The journey

Our journey began in a small district hospital in Kompiani, Enga Province in 2000. Kompiani was one of the many PNG districts that had no doctor at the time. Out of the ongoing struggle that ensued to attract a PNG trained doctor to join the work there, was a focus on evaluating the career intentions of young PNG doctors, and the issues/values that motivated career choices. Some of these were seen as modifiable and some non-modifiable (eg law and order concerns).

The following three core issues were identified as potentially MODIFIABLE factors:

- training
 - All doctors in PNG are seeking post-graduate training. High quality training was highly prized as some of the current programs were seen as being of low quality.
 - Training needs to be targeted to the needs of the tasks being assigned. With respect to rural medicine, young doctors who had spent time in rural hospitals, often felt overwhelmed by the scope of the challenges before them. A rural generalist in PNG faces multiple clinical challenges – the need to be competent in surgery, anaesthesia, operative obstetrics, paediatrics, internal medicine, and psychiatry. In addition, doctors are called upon to be the leaders in public health initiatives in their communities. They also face major administrative and management roles, in running both the district hospital, and in many cases, the entire district health services. Lastly, there are multiple practical tasks they face daily, including setting up and maintaining communications, cold chain and water supplies. PNG doctors in most cases have been totally unprepared for the magnitude of this task.
- peer recognition.
 - Rural medicine was seen as a job for those who could find no other job – doctors who spent time in rural localities were in reality only “treading water” until such time that they could gain admission to speciality training programs. Rural medicine was seen as not holding the same

status as other careers. In fact there is no recognized entity of “General Practice” in the country, no ‘home’ for generalism or rural practice, no career pathway and no recognized end points in the system.

- ongoing supervision and support
 - Doctors working alone in rural localities rapidly become tired, and develop high levels of stress due to managing multiple complex loads. The need to establish good communications to enable young doctors to have contact with senior experienced help was clear. The need for supervisory visits was similarly obvious, as was the need to get the doctors OUT of their hospital, at regular intervals, for periods of rest and training.
 - There were other means of support that we considered modifiable factors – such as the need to explore schooling options for children of doctors working in remote areas. Access to the internet, it became clear early on was a very high value in young doctors. Giving help to help doctors set up their facilities by giving advice as to appropriate equipment, suppliers and maintenance options, was also necessary.

The initiatives

The major steps forward to date can be summarized as follows.

Establishment of the MMED (Rural) program. This is a specialist level program, developed from 2005 as a collaboration between the UPNG - SMHS and the Churches Medical Council (the main rural health providers in PNG). The program is recognized by the University Senate, the Medical Board and is now enshrined in the National Health Plan – Vision 2050. The training is ONLY available to doctor who sign on to work in a rural hospital for the duration, which is usually 6 years. Training occurs concurrently with service time and follows the standard 2-part training of all speciality training programs in PNG. The “Part 1” takes 3 years and can be taken in either Surgery or Obstetrics. Successful completion of the Part 1 requirements allow admission to the second half of the training which culminates in a strenuous set of exams over 4 days. The design of the program ensures that maximum amounts of training are done in good District hospitals across the country, supervised by specialist level doctors. It also ensures service time takes place for at least 7 months of each year in the “sponsoring” hospital, so that both doctor and community feel as though they are obtaining some benefit from the outset. This model stands in contrast to “bonded” schemes where doctors receive full training before hopefully returning to do their service time. In our experience, bonded schemes are highly unsuccessful in PNG.

PNG had its first entrants to the program in 2008 and its first through graduates in 2014. The graduation of the country’s first rural specialists has brought about a major shift in medical culture milieu, with a growing understanding of rural medicine as now being an established career pathway in PNG, equivalent to the other specialties.

The founding of the PNG Society for Rural and Remote Health in 2009, gave rural doctors, other rural health workers, and people with an interest in rural health, a professional “home”. Apart from the very real, but intangible effect on rural doctor morale, that having some sort of professional “identity” gives, the Society works actively to provide ongoing professional education to members, knowing that this is seen as a needed and valued form of support. The Society has also become a focal point for discussion on rural health issues, giving Government, relevant donors, the media and others a place to come for comment, information and advice. It also gives a formal outlet for rural doctors to make comment and advocate on issues relevant to their communities.

The creation of the training program and the formation of the Society has led to formation of important partnerships both within and outside of PNG. PNG is both literally and metaphorically a nation of islands. Countless individuals and organizations expend much energy in relative isolation from one another. The development of a career pathway, recognized by the major health training institution in PNG, the medical board and enshrined in the health plan, has helped to bring many diverse groups together in a common interest and pursuit. Early partnerships with RACGP (Rural) faculty and support from World Health Organization and donors have done much to lift the profile of rural doctors in PNG, which was critical in giving early momentum to the changes in medical culture. Basic supports such as

receiving journals and I.D card from overseas bodies in general practice, gave a huge boost in morale to these rural 'pioneers.'

The way forward

Partnerships development

We need to continue to work to build the momentum that is slowly growing around rural medicine, but bringing together the different players both within PNG, and between PNG and other countries.

The initiatives being taken by the country's two major universities, the UPNG and the Divine Word University, have been in total isolation from one another and are often seen as irreconcilable and competitive in nature. This has been very unhelpful for the overall cause. The revamped Health Extension Officer program run by DWU, was advertised as the "rural doctor program", which created confusion and perhaps even resentment in some quarters. The magnitude of the task facing us in rural health in PNG makes it imperative that the National Department of Health and the Ministry of Health, exert authority to bring the relevant factions together along with key stakeholders, so that the efforts neither duplicate, nor negate one another.

We wish to continue to strengthen existing partnerships overseas, as well as build new ones. The partnership with RACGP (Rural) has been most helpful to date. We wish to engage in dialogue with Australian College of Rural and Remote Medicine (ACRRM), training providers and other bodies relevant to rural health in Australia, as well as exploring linkages with groups such as WONCA (World Organization of Family Doctors). Such linkages can have mutual benefit. Some of the benefits on the profile of rural medicine within PNG, and rural doctor morale, have been already discussed. However we would like to see partnerships explore the possibility of training registrars from other countries, (particularly Australia and New Zealand), visiting PNG rural hospitals for Training Rotations (medical electives have of course been common in the past). There have already been some tentative steps made in this direction, but nothing formalized to date.

Research

There is a major need for basic data collection in PNG as to the status of the rural medical workforce. Where are the doctors? What are their skills and qualifications? What are their career intentions? Gender? Marital status and family size? Are they PNG born or from overseas? Are they from rural backgrounds or town? Do they work with NGO's, Government or the resource sector? What populations do they cover?

Longitudinal studies on workforce choices and the tracking of initiatives to encourage rural workforce participation are essential, so as to maximize the return from precious health resource expenditure.

The capacity for such research in PNG is low. We will need assistance from outside to help design such studies, and do the field work and data collection.

Medical students

"As the twig is bent, so grows the tree." We believe that input into the training of our (precious few) medical undergraduates is essential if we are to significantly shift the tide of the medical culture in PNG, away from town based speciality practice, in favour of a career in rural medicine. PNG in the 1970's led the world in its initiatives in this area. Well funded and organized rural rotations for 6 months at Kainantu and Soho, gave undergraduates an important insight into rural medicine that was second to none in the world. The students did basic public health work and epidemiology, living in villages for up to a week at a time, before returning to the district hospital to participate in clinical work.

This important program was allowed to lapse and remained essentially comatose until 3 years ago when, with the aid of donor funding, it has been revived.

Now tying in with MMED (Rural) students, we are able to send our 5th year MBBS undergraduates, to work in well run district hospitals for 6-8 weeks. The rotations thus far have been highly successful, with very positive feedback from students who had hitherto very poor knowledge and understanding of rural medicine in PNG.

This program needs to be strengthened, and made a permanently funded feature of the MBBS program.

The (relevant to NRHA) recommendations

1. That PNG Society of Rural and Remote Health continue discussions with relevant training organizations in Australia with view to the following.
 - a. Establishing accredited training posts in PNG for Australian registrars wishing to gain exposure in remote tropical medicine.
 - b. Assessing modalities of support for PNG MMED (Rural) trainees and graduates, such as access to CME, conference attendance, membership status and even qualified mutual recognition of qualifications.
 - c. Assistance being provided to perform relevant research in rural medicine in PNG.
2. That PNG Society for Rural and Remote Health, facilitate discussions with UPNG and regional training providers, as to the possibility of other Pacific nations benefitting from the PNG MMED (Rural) program. Such cooperation might include:
 - a. Visits to neighbouring nations to discuss our experience and the models of training that may be of help to them.
 - b. The possibility of entrance of overseas trainees to PNG's MMED (Rural) program – effectively, PNG training rural doctors for other nations.

Presenter

Dr David Mills grew up in Adelaide, South Australia doing medical training at Flinders University and graduating in 1994. He moved to the Northern Territory after completing his internship, and ended up staying for five years, doing three years of hospital training, particularly in obstetrics and anaesthesia. David was fortunate enough to then be employed in Katherine for the completion of his postgraduate degree in rural general practice. A six-week rotation as a student in PNG eventually led to his full-time return to Kompam in Enga Province in 2000. He has been employed as Medical Superintendent there since that time, working at various times with up to two other doctors, but also unfortunately for long periods on my own. That journey has been shared with his wife, Karina, and four children (Natasha, Ashleigh, Chelsea and Nicholas). The experiences in Kompam have been key in the ideas that led to the setting up of PNG's first training program for rural doctors. David is President of the PNG Society for Rural and Remote Health.