Getting the most out of health education in Papua New Guinea

Report from the 40th Annual Papua New Guinea Medical Symposium

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The theme of the 2004 Annual Papua New Guinea (PNG) Medical Symposium, held at the University of PNG (UPNG) in Port Moresby in September, was "Medical and Health Education". Running through the symposium were the threads of the many impressive and innovative developments in health education occurring in the country, and the ever-present threats to these having an optimal impact on the health service. Keynote speakers included Professor Leslie Eastcott (Vice Chancellor, UPNG), Professor (Sir) Isi Kevau (Professor of Medicine, UPNG), Professor Wame Baravilala (Dean, Fiji School of Medicine [FSM]), Professor Ian Maddocks (Emeritus Professor, Flinders University) and Professor Ian Riley (Professor of Tropical Health, University of Queensland). PNG's Prime Minister, Sir Michael Somare, opened the symposium.

Are we placing the major proportion of the budget and emphasising training for the wrong end of the professional scale, when 85% of the population don't really need [this] sophisticated manpower?
(quote from a senior university lecturer)

Problem-based learning in medical training

Problem-based learning (PBL) has been a part of the UPNG and FSM medical curricula for 4 years. This was achieved at UPNG with a remarkably short run-in phase — introducing a completely new curriculum in 4 of the 5 undergraduate years in 2000 and extending to the 5th year in 2001. The UPNG curriculum was described in detail by Professor Isi Kevau and Professor John Vince (Professor of Child Health, UPNG). It is immensely experience-rich — considerably more so than many such courses in Australia (see Kevau, *page 608*).[1]

The curriculum changes made at UPNG were not without controversy. Dr Adolph Saweri, one of the pioneers of health in PNG and among the first graduates of the Papuan Medical School, gave a personal view "from silly mid-on" (as he described it). In 2000–2002, criticism of the new course was voiced within UPNG, in newspapers, and even in the national parliament. This resulted in much public and private debate. But, 4 years into the course, the detractors are few, and the prolonged and vigorous debate has resulted in the new curriculum having widespread ownership and support. Criticism, noted Dr Saweri — without any hint of bitterness for former colonial attitudes to indigenous education — was an almost essential part of social or institutional reform.

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Specialty training

Major developments in medical specialty training were highlighted throughout the conference. Forty general surgeons have been trained through UPNG, and there remain sufficient numbers in the public system to staff every major hospital in the country. Subspecialty training in paediatric surgery, orthopaedics, urology and neurosurgery has occurred in the past decade (see Kevau, *page 608*).[1] Dr McLee Matthew, the first Papua New Guinean paediatric surgeon, spoke of plans for a service covering all regions of PNG.

Surgical subspecialty training has been achieved through collaboration with Australian colleges and the work of wonderfully committed individuals in both countries. The conference welcomed the arrival from Hong Kong of Sydney Chung, the new Professor of Surgery at UPNG.

Reforms in paramedical training

Health reforms in other areas were highlighted during the symposium. In the 1960s, the position of health extension officer (HEO, formerly medical assistant) was designed to address the workforce needs in rural areas, where doctors are few. HEO training, which has undergone major changes in recent years, has produced over 900 graduates, of whom about 400 are still in the workforce. An increasing proportion of HEOs are women. The Divine Word University, a Catholic university in Madang, now runs HEO training. The HEO training school has a new, dynamic Dean, Dr Billy Selve, who is strongly committed to healthcare delivery in rural and remote areas.

Nursing education is also undergoing changes, with a shift towards independent clinical skills training and away from a Western model of theoretical university training that was popularised in recent years. There are also increasing opportunities for postgraduate courses in child health and midwifery in provincial areas.

Factors affecting migration of doctors from regional developing countries to Australia and New Zealand

Push factors	Pull factors
Low remuneration	Remuneration differentials
Work overload	Career opportunities
Absence of a career structure	Professional development
Personal safety concerns	Personal and family safety
Social and political insecurity	Freedom from political influence
Quality-of-life issues	Active recruiting

With the planned expansion of surgical services in PNG, the "gap" between surgical availability and safe anaesthesia will probably increase in the short term. Professor Garry Phillips (Director of Professional Affairs, Australian and New Zealand College of Anaesthetists [ANZCA]) described a modular anaesthetics training program that has been introduced with support from the ANZCA. The modular system will train both anaesthetic technical officers, who receive a Diploma of Anaesthesia, and doctors, who do the training as part of their Master of Medicine.

Threats to optimal impact of improvements in medical and health education

Will the changes to undergraduate training produce better doctors? This is a question that is often asked in PNG and in other countries where PBL curricula have been introduced. Perhaps the more relevant question is whether the new undergraduate medical curriculum, the reforms and developments in HEO and nursing education, and progress in specialty medical training will lead to a higher-quality, more equitable healthcare system. The very strong feeling from the symposium is that they will; however, the answer needs some qualification — the road, like others in PNG, has many potholes.

Many of the threats to equity and quality in healthcare were highlighted. One problem is the uneven distribution of doctors and services in PNG. PNG has an overall doctor to population ratio of 7 per 100 000, the lowest ratio among the Pacific nations (see Watters and Scott, *page 597*).[2] Some rural provinces have fewer than two doctors per 100 000, while Port Moresby has 30 per 100 000.

To make matters worse, the public health system can only afford low numbers of doctors. Severe restrictions on the numbers entering undergraduate training (one report suggested cutting intake from 60 to 20) and areas of specialist training have been proposed by overseas consultants. While such restrictions acknowledge the limited medical workforce that is sustainable without increases in government funding, as well as the high cost of training and employing medical officers compared with primary healthcare workers, they often fail to take account of attrition rates and the need for skilled leadership in healthcare if primary health is to function effectively. They also give fodder to economic rationalists and opportunists within government.

Also highlighted was the need for junior doctors to be supported and mentored throughout their residency in provincial areas. Few rural hospitals are adequately equipped for continuing medical education, although some, with no additional funding, have built libraries, hold regular journal clubs and have programs of resident teaching. Internet access is still a pipedream for hospitals in PNG, many of which do not have out-dialling telephones. Innovative (but often frustrated) efforts to support junior staff by committed doctors and hospital administrators were evident time and time again.

Numerous other instances were cited of limited resources impairing the impact of quality health education. For example, months of delays in salary payments to resident medical officers crippled the hospital system in early 2004. Moreover, a chronic lack of equipment and supplies leads to low morale among hardworking healthcare workers.

Several of the speakers highlighted some of the barriers to development of a good healthcare system: lack of genuine political commitment, political instability in the provinces, inadequate funding of health services, and poor maintenance of health services. Reform of management training and a transparent system of appointments (based on qualifications, merit and experience) were explored as solutions.

"Brain drain" is another great threat to medical workforce development in the Pacific. This particularly affects Fiji, as highlighted by Professor Baravilala (see *page 602*),[3] but, increasingly, PNG is also feeling its impact. As health budgets diminish in real terms and creation of positions within the government sector fails to keep pace with the number of new graduates, highly trained and capable medical graduates are being attracted by better financial and lifestyle prospects elsewhere. Migration of graduates to Australia and New Zealand, as well as moves to the private sector or to non-government organisations, are stifling many recent efforts made to improve medical education and workforce capacity in Fiji. Many factors are involved (Box). The solutions are complex and will require richer countries like Australia viewing their problem of low numbers of doctors in rural areas in the broader context of regional rather than national need.

> The real problem is that there aren't enough doctors prepared to work in rural areas.
> (quote from a senior university lecturer)

Some countries, such as the Philippines, deliberately train (for "export") more doctors than they require, but Pacific medical schools will never have the resources to do so. Proposed solutions include a system of bonding of doctors after graduation to service in their country of origin, but innovative reforms that improve workplace opportunities and conditions in the government health system in developing countries may be more important.

It is time that Australia's view of aid for human resources development moved beyond supporting high-quality training courses in the Pacific to focus on assisting countries with all the elements of retention and career-long development of individuals within the workforce. It is also time governments in the Pacific saw the morale and wellbeing of nurses, doctors and other health workers as being worthy of strong and tangible support.

References

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