MERCENARIES, MISFITS AND MEDICS - HELPING OUT OVERSEAS

Dr Wayne Morriss

Christchurch Hospital Christchurch

The title of this talk comes from the idea that overseas development workers are mercenaries, misfits or missionaries – the so-called "3 Ms." Medics don't always fit easily into this classification, but we often have the knowledge and skills that allow us to make a very significant contribution in resource-poor countries.

The "Overseas Problem"

It's easy to forget that about three-quarters of the world's population lives in poorer countries (low and middle income countries, LMIC). There is a huge disparity in per capita health spending between rich and poor countries, ranging from almost \$7,000 in the United States to \$8 in Sierra Leone (2005 figures).

When we look at surgical statistics, there are two main problems in developing countries – poor access to surgery and high morbidity and mortality rates.

An estimated 234 million surgical operations are performed globally each year. Fifty-nine per cent of these operations are performed in rich countries, even though these countries make up only 16% of the world's population. At the other end of the scale, a tiny 3.5% of the world's operations are performed in the poorest countries. These countries account for 35% of the global population. We may be doing too many operations in high income countries, but it seems clear that many people are missing out on necessary surgery in low income countries.

Unsafe surgery is now recognised by the World Health Organisation as a major public health issue.² It is estimated that surgery causes over one million deaths and seven million disabling complications globally per year. In comparison, there are approximately half a million maternal deaths per year, 0.9 million deaths due to malaria and 2.0 million deaths due to HIV / AIDS.

In LMIC, unsafe anaesthesia is a major contributor to surgical death and disability. Statistics are usually unavailable, but one study in Togo, West Africa showed an avoidable anaesthetic mortality rate of 1 in 133.³ In contrast, Australian figures for the 2003-2005 triennium showed an anaesthesia-related death rate of 1 in 55,000.

Walker and Wilson identified a number of issues associated with increased anaesthetic mortality – not enough medical anaesthetists, inadequate training and supervision of non-medical anaesthetists, limited monitoring, inadequate supplies of drugs, inadequate equipment, and lack of blood for transfusion.⁴

But What About The Pacific?

There are thirteen independent countries in the Pacific. While per capita income may be greater than many parts of Africa and Asia, health statistics are often very poor. Severe staff shortages are common and the region suffers from many problems related to communication and transport difficulties.

Papua New Guinea has a population of over six million people spread over an area 1.7 times that of New Zealand, but there are only 15 medical anaesthetists for the entire country, most based in Port Moresby.

In the latest global maternal mortality ratio statistics, the rate in Fiji is over 10 times the rate in New Zealand and Australia. The rate in PNG is about 40 times the rate in New Zealand and worse than many countries in sub-Saharan Africa.⁵



Is It All Too Hard?

The problem with presenting global statistics is that they are overwhelming and it's difficult to know where to start. But there are many ways we can help, and our efforts can be rewarded by real change.

Help can take many forms – clinical or teaching work, short term visits or long term stays, small or large projects, or supporting others to work overseas. To quote Peter Benenson, the founder of Amnesty International, it is "better to light a candle than curse the darkness."

Getting Started in Fiji

In 1999, I was offered a job in Fiji at the same time as a consultant anaesthetist job in Christchurch. I decided to take the Fiji job – a two year position as a Senior Lecturer in Anaesthesia and Physiology at the Fiji School of Medicine in Suva – and my family and I moved there in April 2000.

We expected to face many challenges during our time in Fiji, but we did not expect a coup! Five weeks after we arrived, on 19 May 2000, a small group of soldiers led by George Speight took over the parliament buildings and held members of the government hostage for 56 days. The seven months following the coup were very stressful, with a declaration of martial law, frequent episodes of civil unrest, and a rise in racism and religious intolerance.

The work was very challenging, both at the medical school and the Colonial War Memorial Hospital, Suva's main hospital. There were 17 coup-related deaths and hundreds of casualties. Limited resources were stretched even thinner, with severe drug shortages and loss of staff. One year after the coup, over thirty percent of doctors had left Fiji.

While not always comfortable, our time in Fiji was a hugely significant learning experience from a personal and professional point of view. Fiji shares many of the problems of other resource-poor counties and these problems were brought into sharp relief by the coup.

Education, Education, Education!

Inadequate training and not enough anaesthetists are common problems in LMIC. Good education is vital if we are to address these problems.

The World Federation of Societies of Anaesthesiologists (WFSA) plays a very important role in global anaesthetic education. It has a membership of over 120 anaesthetic societies, representing about 140 countries. The WFSA itself has very limited resources but has an excellent track record of leveraging other funding. A recent analysis showed that, for every dollar spent by the WFSA, an extra \$6.80 was contributed by volunteers and other organisations.

I have recently taken over as Chair of the WFSA Education Committee. We are a group of eight with members from Russia, Serbia, Kenya, Malaysia, the United States, Venezuela, Brazil and New Zealand. Over the next four years, we will be working hard to support numerous educational activities around the world, including training programmes in South America, Asia, Africa and the Middle East. Other committee activities include support for regional meetings and short courses in less affluent countries.

The most successful WFSA training programme is the Bangkok Anaesthetic Regional Training Centre (BARTC), based at Siriraj Hospital in Bangkok, Thailand. During the last 16 years, the programme has trained 60 anaesthetists from poorer countries in Asia. Many graduates of the programme have gone on to be the anaesthetic leaders and teachers in their own countries.

The Essential Pain Management (EPM) course was first run in Papua New Guinea in 2010, and it has now been run in Fiji, Solomon Islands, Vanuatu, Cook Islands, Micronesia, Tonga, Vietnam, Mongolia, Tanzania, Rwanda, Kenya and, most recently, Honduras. It is an interactive one-day course that addresses local pain management barriers and uses a series of case discussions to illustrate the use of a simple framework for managing pain patients. Very importantly, there is also a half-day instructor course so that local instructors take over the teaching of the course within a few days. This encourages relevance and is vital for the local sustainability of the



programme. It's easy to underestimate the problems associated with providing even simple pain relief when resources are short. Pain is often not seen as a priority, there may be severe staff shortages, and essential drugs, such as oral morphine or even paracetamol, may not be available. EPM attempts to address these problems.

Short term surgical work can result in education at many levels. I recently went on a general surgery trip to a remote village called Mangelsen in western Nepal. The trip was very rewarding – I got to work with a great team, the surgery and anaesthesia were fascinating, and we were able to do some good for individual patients. For me, the trip was an example of "two-way education." I learned many useful things and I hope I was also able to impart some useful knowledge to the local health workers. One of the local nurses, Suresh, is the sole anaesthetic provider in the area and is often called on to do spinal anaesthetics for Caesarean sections. He was thirsty for knowledge and I hope that our time together will result in some real improvement in health care in this small corner of the world.

Getting Involved

There are many ways to get involved, some easier than others. The following are a few suggestions for getting started –

- Most people do not want to start by going on a six-month mission to a war zone with Medicin San Frontier. A gentler introduction would be to attend a meeting or conference in a LMIC and to meet some of the locals
- There are several courses that have been developed to give people the knowledge and skills to work in a resource-poor country. Consider attending the Real World Anaesthesia Course (held in Australia and New Zealand) or the Anaesthesia in Developing Countries course (run from the UK and held in Uganda)
- The NZSA Overseas Aid Committee and ASA Overseas Development and Education Committee both
 maintain databases of people interested in working overseas. Joining one of these databases can be a
 good way of making contacts and finding out about locum opportunities and longer term work
- There are a number of established programmes like the RACS Pacific Island Project and Interplast that
 organise surgical and educational trips to the Pacific and other regions. It may not be possible to join one
 of these teams without prior experience, but consider volunteering as an extra pair of hands

Conclusion

There is now greater awareness of the importance of safe anaesthesia in resource-poor countries. As anaesthetists, we have can help in many ways and our efforts can be rewarded with real change.

References

- 1. Weiser TG, et al. An estimation of the global volume of surgery: a modelling strategy based on available data. Lancet 2008; 372: 139-44
- 2. www.who.int/patientsafety/safesurgery/en/
- 3. Ouro Bang'na AF, et al. Deaths associated with anaesthesia in Togo, West Africa. Trop Doct 2005; 35: 220-2
- 4. Walker I, Wilson I. Anaesthesia in developing countries a risk for patients. Lancet 2008; 371: 968-9
- 5. Hogan et al. Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5. Lancet 2010; 375: 1609-23
- 6. www.anaesthesiologists.org/
- 7. www.anzca.edu.au/fpm/fellows/essential-pain-management

