



Neurological letter from Australia

Graeme J. Hankey

Consultant Neurologist and Head of Stroke Unit, Royal Perth Hospital, Western Australia; Clinical Associate Professor, Department of Medicine, University of Western Australia.

E-mail: gjhankey@cyllene.uwa.edu.au

Australia is a vast country, as large as Europe or the United States, yet populated by only 19 million people. Colonized by Europeans and situated in the Asia-Pacific region, it is a western democracy with multicultural ethnicity, waning European ties (despite 'endorsement' of the Queen as head of state in a recent referendum), and increasing integration in the Asia-Pacific economy.

The Australian healthcare system

About 8.5% of the gross domestic product, \$Aus 40 billion, is spent on the Australian healthcare system by the public and private sector in a ratio of 2:1 (Buckley *et al.* 1998). The public contribute an ever increasing proportion (now 1.5%) of their taxable income to a 15-year-old form of public insurance (Medicare), which was designed to provide widely accessible general and

specialist care in the community and public hospitals. Individuals who prefer access to the specialist and private hospital of their choice contribute to private insurance also. Both the Commonwealth (federal) Government and the states and territories administer this somewhat confusing and disintegrated system which, surprisingly, provides a level of health care that is probably equal to anywhere in the world. Perhaps this is simply a reflection of prosperity, or a perception of prosperity.

Medical education in Australia

Undergraduate medical education is the responsibility of 10 university medical schools, which accept about 1250 new students each year despite attempts by successive Commonwealth governments to respond to a perceived excess of doctors by restricting entry to 1000 students per year. Since 1990, the medical schools have opened places to national applicants outside their own states, and international fee-paying students. Since the Higher Education Contribution Scheme was introduced in 1988, Australian medical students pay \$Aus 5593 (Euro 3360) per year or repay their debt when their income rises above a threshold. The undergraduate course varies from four to six years.

Medical research in Australia

Although only a small proportion of advances in medical research are made by Australians, Australia produces eight times more publications in medical journals than predicted from its population, and has produced four Nobel prizewinners in physiol-

ogy or medicine: Howard Florey (clinical use of penicillin); Macfarlane Burnet (clonal selection theory in immunology); John Eccles (neural synapses); and Peter Doherty (restriction of cellular immunity) (Buckley *et al.* 1998). Perhaps another may be Barry Marshall who was my medical registrar in 1982 when I was a resident medical officer and (with John Warren) discovered the role of *Helicobacter pylori* in peptic ulcers two years later (1984).

Neurology in Australia

Neurology in Australia has blossomed in the past four decades, such that there are now about 14 neurologists per million population and each capital city is served by at least one academic department of neurology (Eadie 1994).

The Australian Association of Neurologists (AAN) has more than 500 members, of which about 250 are practising neurologists, and the other half are neuroscientists, trainees, research fellows, and retired and honorary members. Of those in clinical practice, about half are private practitioners with part-time appointments at a major public teaching hospital, a quarter are salaried staff specialists, and the remainder academic staff and private practitioners attached to district or private hospitals.

The AAN is represented by council, 11 committees (e.g. core training, advisory to the Royal Australian College of Physicians, practice guidelines) and five state education committees.

It is a requirement of AAN trainees that after internship, at least three years training in General Medicine, and success in the first part examination of the Fellowship of the Royal Australasian College of Physicians, they embark on at least three years of neurology training, of which at least one year must be in a different centre, preferably overseas. For decades now, AAN trainees have enjoyed the opportunity of applying for an overseas training position offered annually by the Mayo Clinic, USA; the National Hospital, Queen Square, London, UK; and the Radcliffe Infirmary, Oxford, UK. Here, many of us have had the fortune to meet special people, make lifelong friends, consolidate our sound general med-

ical and neurology training, learn new and innovative aspects of clinical neuroscience, and return home the richer as neuroscientists, teachers, researchers, and people; and the poorer financially (at least for a while).

We all try to meet at least annually at the three day Annual Scientific Meeting (ASM) of the AAN, which is devoted mainly to presentations of basic and clinical research in the neurosciences. In the last decade, a number of specialist neurological groups/societies have emerged, such as Stroke, Epilepsy, Neuro-ophthalmology, Neuro-otology, Neuromuscular, Movement Disorders, and Headache, which also meet annually, and sometimes in conjunction with the ASM of the AAN.

In 1963 the AAN began publishing the proceedings of its ASMs as the *Proceedings of the Australian Association of Neurologists*, under the editorship (for the next nine years) of its then President, the late E Graeme Robertson. All issues subsequently featured the waratah insignia of the AAN on the front cover. In 1977, when Professor John Tyrer was Editor (1973–85), Adis Press became publisher of the *Proceedings* (until 1990) and the name was changed to *Clinical and Experimental Neurology*. Professor Mervyn J Eadie assumed editorship of *Clinical and Experimental Neurology* in 1985 and continued until 1994 when the AAN accepted the invitation of the Neurosurgical Society of Australia to link itself with the new Pacific rim based *Journal of Clinical Neuroscience* edited by Professor Andrew Kaye. All members of the AAN now receive the bimonthly publication of the *Journal of Clinical Neuroscience*. We now look forward to subscribing to a complementary review journal of Neurology, which will fill the vacancy between scientific articles that none of us has time to read or to try to understand, and the constant stream of biased rubbish that is imposed upon us by pharmaceutical company representatives. Will this be *Practical Neurology*?

References

- Buckley P, Marley J, Robinson J *et al.* (1998) Australia. *Lancet*, **351**, 1569–78.
- Morris J & Eadie M, (1994) *A Directory of Neurology in Australia*. Merino Lithographics Pty Ltd, Australia.