Holland

J. van Gijn

Professor of Neurology,
Department of Neurology,
University Medical Centre,
Heidelberglaan 100, 3584
CX Utrecht, the Netherlands;
E-mail: J.vanGijn@neuro.
azu.nl

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With 16 million inhabitants the Dutch take some meagre consolation in being the biggest of the small European countries. That they no longer rule the world's oceans is a loss felt less deeply than by some of our neighbours. At any rate, the Dutch now dominate the holiday resorts in France and Spain.

MEDICAL SCHOOLS

In the 1980s there were about 200 students per year in each of the eight medical schools, at a time when the eternally false predictions about the required number of doctors had resulted in an oversupply. The inevitable swing in the opposite direction began in the current decade, hence the number of first-year students has now increased to almost 400 per university. The numerous applicants are selected by lottery, with only some weighting based on the results of the national finals in secondary school. Squandering young talent by the dice has always sounded strange to foreign ears. Yet the interview system is prone to bias: put two Dutch people together and they are bound to have several acquaintances in common. In the last few years some medical schools have nonetheless experimented with selecting some of their entrants for themselves, but the process proved extremely labour-intensive and the 'super students' did not perform appreciably better than their peers.

The curriculum has been 'modernised' about every five years in most universities. Problem-based learning in small groups is now *de rigueur* but awareness is growing that clinical lectures should be reintroduced and that doctors require a modicum of anatomical knowledge.

TRAINING PROGRAMMES IN NEUROLOGY

Eight university hospitals and eight general hospitals have been certified as institutions for training in neurology. The politics governing the allotment of training positions is characterized by a delicate balance of power between these two factions. The odd result is that one in three Dutch neurologists has no academic training. The process itself consists of doing training (registrar, resident) jobs for six years, including one year of clinical neurophysiology. Most of these stints are at the mother institution. The programme includes rotations in related disciplines: neurosurgery, paediatric neurology, psychiatry (optional) and intensive care medicine (optional). Specialist training in general medicine before entering neurology is not required. Therefore Dutch neurologists are mostly uncomfortable with reading ECGs and treating diabetes, but they are quickly catching up with the new trend of treating their vascular patients with statins and antihypertensive agents as well as with antithrombotic drugs.

Working hours for residents are limited by law to 48 h per week. The increasing number of women in the profession has created a demand for part-time training (fewer hours, for more years), yet it is still rare and it can be accommodated only in large centres. Formal teaching sessions for residents are increasingly required. A single person is responsible for each local training programme. Its quality is formally reviewed by a committee of peers at least every five years.

In most university hospitals the training can be combined with some three years of research, often in split periods. When enough external research grants are obtained such an arrangement may even become the rule. An extra bonus is that residents can follow up outpatients with chronic conditions for a long time. Time is a great teaching tool, much better than a series of snapshots of different patients in different phases of their disease.

REVALIDATION

Specialist revalidation takes place every five years. Some Dutch specialist societies, such as those for cardiology and surgery, have developed rather stringent requirements in terms of procedures performed and courses attended. For neurology the optimum is probably a little less liberal than the current situation (mere participation in a course every six months and in a written test every year will suffice).

HEALTH CARE

Private practice has been completely phased out from academic teaching hospitals over the last 20 years. George Bernard Shaw would be shocked to hear that in many general hospitals in the Netherlands medical specialists still behave as entrepreneurs, but this is not much different from the situation in many other countries in Europe. The result is the usual pecking order of income, with cardiothoracic surgeons at the top and paediatricians at the bottom. Neurologists in general hospitals can still somewhat bolster their income with electrophysiological procedures and by economizing on time. Some young neurologists are still lured away from

Rembrandt van Rijn (1606-1669). *The Anatomy Lecture of Dr. Nicolaes Tulp* (1632). Oil on canvas (169,5 x 216,5 cm). Mauritshuis, The Hague.

universities by these prospects. At any rate, even this system is now under pressure and 'socialized medicine' (as Americans call it with some disdain) is slowly spreading from Scandinavia downwards.

RESEARCH

Government cuts in the 1980s made academic hospitals acutely aware that research is not an activity for the chosen few, but part of the job. This has often resulted in focusing of research activities to subspecialty areas and in the formation of research groups with a core of at least four or five consultant physicians. Such groups provide the 'critical mass' that attracts new grants as well as new talents. In this way – to name a few main topics – research on dementia tends to be centred in Amsterdam (Free University and Academic Medical Centre); on neuromuscular disease in Amsterdam (AMC), Rotterdam, Utrecht and Nijmegen; on cerebrovascular disease in Rotterdam, Utrecht, Maastricht and Amsterdam (AMC); and on neurogenetics in Leiden and Nijmegen. Of course there are differences in emphasis even within these areas. Although the research output is comparatively good for Dutch medicine as a whole, there is no reason for complacency. The key to success is teamwork, with as few stars as possible – a lesson the Greeks taught the rest of Europe at the recent football championship in Portugal.

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