Equipping tomorrow's doctors for the patients of today

Geriatric medicine arrived relatively late. It emerged from the pioneering work of Marjory Warren at the West Middlesex Hospital in the 1930s. It saw its first chair appointed in 1965. It was not until the 1990s that the evidence base for its central intervention – comprehensive geriatric assessment – was fully established (Stuck et al, 1993).

Establishing that comprehensive geriatric assessment worked, however, was a game-changer. It demonstrated that a medical diagnostic paradigm, used in isolation, was inadequate when faced with complex older patients with multiple pathologies, physical dependency, cognitive impairment and frailty. Such patients needed diagnosis but when this was coupled with multidisciplinary, multimodal assessment – taking account of physical and mental health, functional, social and environmental issues – survival improved, the rate of cognitive decline slowed and the rate of readmissions and institutionalization diminished. These findings have since been reinforced by multiple Cochrane reviews, with increasing statistical power at each iteration (Ellis et al, 2011).

It would seem that the evidence base for comprehensive geriatric assessment arrived just in the nick of time. Demographic shift will see the number of people aged over 60 years worldwide rise from 605 million in 2000 to almost 2 billion by 2050, while the number of people aged over 80 years will quadruple to 395 million. This has already influenced the work of doctors. Two thirds of UK acute hospital admissions are of patients aged over 65 years, the highest consultation rate in general practice is in those aged 85–89 years and the average age of elective surgical patients is increasing.

Teaching about geriatric medicine in medical schools

Given this demographic shift and an evidence-based model of working which improves outcomes for older people with frailty, it would seem to follow that this would be a core, indeed substantial, part of the curriculum in most UK medical schools. This is, unfortunately, not the case. The majority of UK medical schools surveyed in 2013 taught about delirium, dementia, stroke, falls, osteoporosis, extrapyramidal disorders, polypharmacy, incontinence, ethics and mental capacity. A third, however, failed to teach about elder abuse and two thirds failed to teach recognized classifications of the health domains required to understand and implement comprehensive geriatric assessment. The amount of time devoted to specific learning outcomes in geriatric medicine was alarmingly low, with a median (range) of 55.5 hours (26–192 hours) devoted out of a 5-year course (Gordon et al, 2014).

This is not unique to the UK. Other countries that have conducted similar surveys, including the USA, Canada, Germany, Austria, France and the Netherlands, have found similar proportions of the curriculum devoted to the specialty. The reason for this, although not clear, might be related to the fact that most medical curricula were well established by the second half of the 20th century when the specialty was still finding its feet and establishing its evidence base. Subsequent shifts to problem-based and integrated curricula may not have been radical enough in modifying the subject mix to take account of evidence-based ways of working that address the prevailing demography.

What is the solution?

There is broad expert consensus about what doctors ought to know to be effective practitioners in the 21st century (Oakley et al, 2014). Well-published curricular development programmes have included iterative consensus building in the USA, a pan-European Delphi process led by the Union of European Medical Specialists and a UK exercise to map consensus learning outcomes to *Tomorrow's Doctors* (General Medical Council, 2009).

However, specifying what ought to be taught is probably not enough. Literature reviews suggest three other mechanisms whereby effective teaching in learning outcomes related to older people might be delivered (Mateos-Nozal and Beard, 2011). The first is through stewardship – professorships in geriatric medicine have been instrumental to building up the specialty in several countries. It is striking that the UK, as the first country to appoint a professor in the specialty, now has chairs in only 13 out of 31 medical schools. The second mechanism is through allocation of additional funds – in the USA very significant improvements in knowledge, skills and attitudes related to the management of older people were seen following programmes funded by large benevolent bequests from the John A. Hartford and Donald W. Reynolds Foundations. The third mechanism is to develop innovative teaching models to make the most of the time available.

So far, geriatric medicine has been under-represented in UK curricula. There are not many professors in the specialty and, post-credit crunch, large benevolent bequests are hard to come by. It is perhaps unsurprising, therefore, that educators in the field have focused on developing innovative teaching models. Recent papers, summarized in a review article by Oakley et al (2014), have reported the impact of e-learning suites and the use of high- and low-fidelity simulation to provide insights into the lived experience of older patients and the difficult clinical decisions involved in caring for them. Work to provide more prolonged contact between medical students and community-dwelling physically well older people has shown promising effects in improving attitudes among medical students – both to older people and the work of caring for them (Oakley et al, 2014).

However, there remains significant work to be done. An ever-increasing array of

technology – social media, smartphones, educative interactive games – opens up an ever-increasing array of possibilities for maximizing student understanding of the business of what it is to be frail. The opportunities for inter-professional education – in a specialty defined largely by multi-professional working – have been under-explored and evaluated. Work needs to be done to understand prevailing attitudes among doctors towards working with older people, in order to improve attitudes in medical students.

Conclusions

The challenges, therefore, are clear. The majority of patients are now older, complex, frail and dependent. Tomorrow's doctors need to be taught the knowledge, skills and attitudes required to care for them – these have inadequate emphasis and coverage in medical curricula at present. The challenge to our profession and to the medical schools under our stewardship is to find time and space to teach the recommended curricula, to support development in academic leadership in the specialty such that champions and role models are prevalent, and to provide educators in the specialty with sufficient support and latitude to develop innovative teaching that really will deliver doctors fit for purpose. If we do that, then medical schools may finally equip tomorrow's doctors for the complex older patients with frailty we increasingly see today. BJHM

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KEY POINTS

- There is an evidence-based model of care for older patients with frailty – comprehensive geriatric assessment – which all doctors should have the knowledge, skills and attitudes to deliver in order to ensure the best outcomes.
- Medical schools – within the UK and internationally – do not currently teach enough about management of older patients to equip doctors to provide gold standard care.
- Consensus curricula about undergraduate teaching in ageing and geriatric medicine are now well published, both within the UK and internationally.
- Outside the UK, professorships in geriatric medicine and dedicated funds to develop teaching have been shown to improve student knowledge, skills and attitudes.
- A number of innovative teaching interventions about ageing and geriatric medicine have been shown to improve student learning and have the potential to further enhance student learning.