

UK medical teaching about ageing is improving but there is still work to be done: the Second National Survey of Undergraduate Teaching in Ageing and Geriatric Medicine

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Abstract

Introduction: in 2008, a UK national survey of undergraduate teaching about ageing and geriatric medicine identified deficiencies, including failure to adequately teach about elder abuse, pressure ulcers and bio- and social gerontology. We repeated the survey in 2013 to consider whether the situation had improved.

Method: the deans of all 31 UK medical schools were invited to nominate a respondent with an overview of their undergraduate curriculum. Nominees were invited by email and letter to complete an online questionnaire quantifying topics taught, type of teaching and assessment undertaken, and the amount of time spent on teaching.

Results: one school only taught pre-clinical medicine and declined to participate. Of the 30 remaining schools, 20 responded and 19 provided analysable data. The majority of the schools (95–100%) provided teaching in delirium, dementia, stroke, falls, osteoporosis, extra-pyramidal disorders, polypharmacy, incontinence, ethics and mental capacity. Only 68% of the schools taught about elder abuse. Thirty-seven per cent taught a recognised classification of the domains of health used in Comprehensive Geriatric Assessment (CGA). The median (range) total time spent on teaching in ageing and geriatric medicine was 55.5 (26–192) h. There was less reliance on informal teaching and improved assessment:teaching ratios compared with the 2008 survey.

Conclusions: there was an improvement in teaching and assessment of learning outcomes in ageing and geriatric medicine for UK undergraduates between 2008 and 2013. However, further work is needed to increase the amount of teaching time devoted to ageing and to improve teaching around elder abuse and the domains of health used in CGA.

Keywords: *undergraduate medical education, geriatrics, medical education, curriculum, elder abuse, older people*

Introduction

Over-65s comprise two-thirds of acute hospital admissions in England and Wales [1]. The highest consultation rates in

general practice are for those aged 85–89 [2]. Older people with multiple morbidities comprise an increasing proportion of elective surgical patients [3]. With very few exceptions, all doctors require core knowledge and skills to enable them to

work with frail older patients. It is not, however, guaranteed that all doctors will undergo post-graduate training in geriatric medicine [4]. This places considerable importance on good coverage of the specialty at an undergraduate level.

When UK undergraduate teaching about ageing and geriatric medicine was surveyed in 2008 [5], a mixed picture was found. The majority of the medical schools taught about conditions commonly seen in older patients but many failed to formally assess these subjects, with the possible effect that students would place less emphasis upon learning them. Only 47% of the schools taught about elder abuse and even fewer taught about the biological and social gerontological disciplines underpinning effective practice in older patients.

Since these findings were published, the importance of teaching doctors how to care for older patients has been emphasised in UK policy documents including the National Dementia Strategy [6], Hospitals on the Edge [4], the Shape of Training review [7] and the Francis Report [8]. Against this background, we set out to establish whether there had been any improvement in UK undergraduate teaching about ageing since the last survey in 2008.

Methods

The study took place in 2013. Since the previous iteration, the UK national guidance for medical schools, Tomorrow's Doctors, had been updated [9]. We undertook a curriculum mapping exercise to verify that all items represented in the 2008 survey were still supported by the new guidance and found this to be the case.

To maximise comparability, we reused the questionnaire from 2008 with only minor cosmetic changes. No specific piloting was undertaken, as it had already been used successfully at the previous iteration.

The questionnaire used a series of outcomes from the British Geriatrics Society's recommended undergraduate medical curriculum [10]. For each, we asked whether and how it was taught and examined, the disciplines involved in teaching and the amount of time allocated. Only teaching delivered to all students was included. Topics taught to sub-groups of students or as student-selected components were not recorded. A free-text box was provided on every page to allow clarification. The full questionnaire can be viewed online at: <https://www.surveymonkey.com/s/RPT7XT5>.

The deans of all 31 UK medical schools were approached by email and letter, asking them to nominate a respondent with a comprehensive overview of teaching in ageing and geriatric medicine across the undergraduate curriculum. Where direct approaches were unsuccessful, members of the UK Association for Academic Geriatric Medicine comprising representatives from every UK region were asked to identify respondents within their local schools. The electronic survey was then sent to all nominees. Two weeks before the survey closed, the identified contact at all schools was telephoned to encourage completion.

Table 1. Number (%) of medical schools teaching and examining each domain in the 2013 survey

Topic	Taught, <i>n</i> (% of respondents)	Examined, <i>n</i> (% of respondents)
Cellular ageing	13 (68)	11 (58)
Physiology of ageing	16 (84)	12 (63)
Ageing and pharmacology	18 (95)	15 (79)
Delirium	19 (100)	16 (84)
Dementia	19 (100)	17 (89)
Falls	18 (95)	16 (84)
Incontinence	18 (95)	14 (74)
Osteoporosis	18 (95)	15 (79)
Extra-pyramidal disorders	17 (89)	15 (79)
Pressure ulcers	15 (79)	11 (58)
Stroke	19 (100)	15 (79)
Polypharmacy	19 (100)	16 (84)
Ethics	19 (100)	15 (79)
Mental capacity	19 (100)	15 (79)
Advance directives	14 (74)	11 (58)
Elder abuse	13 (68)	10 (53)
Terminology and classification of health	7 (37)	4 (21)
Assessment scales in health	16 (84)	13 (68)
Demographics	18 (95)	15 (79)
Social ageing	14 (74)	12 (63)
Models of services	16 (84)	13 (68)

In analysing the data, non-response for an individual domain within an otherwise complete questionnaire was taken to indicate that a domain was not taught or examined.

Results

Although there were 31 UK medical schools, one of these taught pre-clinical medicine only and declined to participate on this basis. Of the 30 remaining schools, 20 completed the questionnaire. Nineteen provided analysable data, with one providing only a blanket response for each domain that teaching took place as part of a 5-year integrated course.

The number of schools teaching and assessing each topic is given in Table 1.

Reliance on informal (informal ward or book-based) teaching was less evident than at the previous iteration of the survey. In 2008, pressure ulcers were taught about using informal methods in 41% of the schools. In 2013, this topic was taught formally in the majority, with only 2 (11%) of the schools relying on informal methods—one used book-based learning and the other informal ward-based teaching.

Fourteen schools provided responses to both iterations of the survey. Data from these schools are given in Table 2.

Eighteen schools provided data on the duration of teaching. When the time allocated to teaching was summed across all topics, the median (range) total time spent on topics in ageing and geriatric medicine in 2013 was 55.5 (26–192) h up marginally from 49 (4.5–95) h in 2008.

Nine schools did not provide data for either the 2008 or 2013 survey.

Table 2. Schools responding to both iterations of survey ($n = 14$) indicating changes in teaching and assessment over time

Topic	Taught in 2008, <i>n</i>	Taught in 2013, <i>n</i>	Change	Examined in 2008, <i>n</i>	Examined in 2013, <i>n</i>	Change
Cellular ageing	7	10	3	3	8	5
Physiology of ageing	8	11	3	7	9	2
Ageing and pharmacology	12	13	1	8	14	6
Delirium	14	14	0	10	13	3
Dementia	14	14	0	10	13	3
Falls	14	14	0	10	13	3
Incontinence	14	14	0	10	12	2
Osteoporosis	13	14	1	9	12	3
Extra-pyramidal disorders	14	13	-1	10	13	3
Pressure ulcers	11	11	0	7	10	3
Stroke	14	14	0	10	12	2
Polypharmacy	14	14	0	11	13	2
Ethics	13	14	1	9	11	2
Mental capacity	12	14	2	8	12	4
Advance directives	12	10	-2	8	9	1
Elder abuse	8	8	0	4	8	4
Terminology and classification of health	6	5	-1	3	3	0
Assessment scales in health	14	11	-3	8	9	1
Demographics	12	13	1	6	11	5
Social ageing	7	11	4	4	10	6
Models of services	12	12	0	7	11	4

Conclusions

This UK survey found that there was an increase in the number of medical schools teaching and examining most topics between 2008 and 2013. Conditions commonly seen in geriatric medicine—delirium, dementia, stroke, falls, osteoporosis, extra-pyramidal disorders, polypharmacy and incontinence—were taught and examined more widely than before. Ethics continued to be taught widely and more schools taught and examined about mental capacity, cellular and physiological ageing than before. However, there were a number of deficiencies. Only 68% of participating schools taught about elder abuse and just over a quarter about terminology and classification of health. The median total time devoted to structured teaching in ageing and geriatric medicine was low.

The persistent failure to teach about elder abuse should raise concern. 2.6% of UK over-65s have been found to experience elder abuse [11]. Up to a fifth of older people presenting to emergency departments may have experienced neglect [12]. Medical students struggle to recognise elder abuse in vignette-based scenarios [13]. The General Medical Council states that doctors must be able to identify the signs of abuse or neglect in vulnerable people and know how to respond [9]. By not teaching about elder abuse, medical schools are failing future doctors and their patients.

Terminology and classification of health was the least widely taught topic at both iterations. Under this heading, we asked whether the schools taught a recognised classification of the domains of health used in CGA, such as the International Classification of Functioning, Disability and Health (ICF). CGA is an evidence-based model of assessment and healthcare delivery. It is multidimensional, incorporating medical, psychological, functional, social and

environmental aspects of patient care. It improves outcomes for frail older patients [14], but it demands that practitioners move beyond a diagnosis-driven paradigm to one that takes a broader view of health [15]. The ICF, developed and recommended by the World Health Organisation [16], can facilitate student understanding of both rehabilitation and geriatric medicine [17]. It provides a logical basis for CGA and, if CGA is to be central to healthcare delivery in the future, the ICF should have a more prominent place in undergraduate curricula.

55.5 h, <2 weeks, of study devoted to ageing does not reflect the predominance of frail older patients in most doctors' workload. Twenty-five per cent of hospital inpatients have dementia and over-85s account for 22% of acute hospital bed days [18]. This may mean that much time spent in other specialties during medical training will be with frail older people. Time spent 'around' older patients, however, is not the same as time spent learning about frailty, complexity and cognitive impairment. More space should be devoted to the latter.

Assessment plays a pivotal role in learning. Ramsden [19] stated that, for many students, assessment is the curriculum. Students focus their efforts on learning outcomes that they know are assessed. In this respect, the increase in the number of topics assessed between 2008 and 2013 is encouraging. The ambition, though, should be for all outcomes which are taught to be assessed.

The strengths of this study included the use of an objective questionnaire based on the UK national curriculum for medical undergraduates, the inclusion of all UK medical schools, and the nomination of respondents by deans. Measures undertaken to maximise response rate, including the use of an electronic interface, email and telephone reminders, resulted in a good response rate which, at two-thirds of

UK medical schools, was high for an online questionnaire [20]. Possible reasons for non-response were identified by informal feedback at both iterations and included the amount and detail of information requested, as well as the view that the questionnaire did not reflect the structure of all UK undergraduate curricula. The fact that nine medical schools failed to respond to either iteration raises the possibility of response bias. It is unlikely that non-responding schools would be those with a particular focus on teaching in ageing and geriatric medicine and it is therefore possible that the results provide an overly optimistic view. The failure of a just under a third of UK medical schools to respond to either iteration of this voluntary study raises the question as to whether regulatory collation of performance around teaching related to ageing is required. The study quantified only the presence or absence of teaching within curricula and did not consider finer details of delivery. A recent survey of teaching about dementia showed coverage in all UK medical schools but a widespread failure to focus on behaviours and attitudes towards people with dementia [21]. Other topics identified as taught widely in this survey might show similar inadequacies, when considered in detail.

Key points

- Between 2008 and 2013 coverage of learning outcomes in ageing and geriatric medicine in UK undergraduate medical courses increased.
- Only 68% of the schools surveyed taught about elder abuse.
- Less than half taught about a recognised classification of the domains of health used in comprehensive geriatric assessment.
- The median (range) total time spent on teaching in ageing and geriatric medicine was 55.5 (26–192) h of a 5-year course.
- Key priorities for UK medical schools should be increasing time spent on teaching ageing and improving coverage of elder abuse.

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Conflict of interest

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