Growing evidence suggests that health services are not adequately meeting the needs of older people (RCPsych 2005; PHSO 2011; CQC 2012; RCP 2012). In the UK, when the National Health Service (NHS) was established in 1948, people could expect to live to their mid-60s, and diseases such as TB and influenza were more major health concerns than chronic multi-morbidity prevalent today. For all its considerable successes, the NHS has not sufficiently adapted to provide efficient and excellent care for an ageing population (King’s Fund 2014).

Arguably, a fundamental concern for medical educators must be to address the healthcare needs and challenges of the population at large. Good educational practice would suggest that teaching and learning should evolve to proportionally reflect the requirements and expectations of current healthcare service users. However, although older people are now “core business” for the NHS (Oliver 2013), and for health services internationally, there still exists a clear disconnect between actual and desired practice at all levels. A number of recent UK reports have specifically highlighted the need to improve education and training to better meet the needs of an ageing population (RCN 2008; CQC 2012; RCP 2012; DoH 2014). Most recently, the “Francis report” identified significant shortcomings in care particularly relevant to older people, and received widespread media coverage, bringing this issue to the attention of the public (Mid Staffordshire NHS Foundation Trust Public Inquiry 2013).

So, why the mismatch between current medical education and demographic trends? We propose a number of contributory factors which are key to understand in order to evolve and align our educational processes.

First, curriculum change is a complex process; hence there is an inevitable delay between the epidemiological changes at a population level and integration into an existing, and sometimes inflexible, structure. A 2008 survey showed that geriatric medicine was under-represented in UK medical school curricula (Gordon 2010). The same survey repeated in 2013 showed progress, but reiterated persisting concerns including lack of teaching time and assessment devoted to ageing and geriatric medicine (Gordon 2013). Despite the accumulating evidence of need, curricula adaptation remains sluggish.

At a policy level, these concerns about a potential disconnect have been articulated in the UK by Greenaway in The Shape of Training report (2013), which sets out a road map for the training of postgraduate medical staff. At its heart is a need to broaden training such that it takes into account the changing needs of the population and address the twin challenges of an increasing ageing population predisposed to chronic disease. The report recognises that the majority of doctors will need to be able to work in multi-professional teams caring for patients with complex conditions, rather than single diseases. The direction has been set, however, a realisation among teachers exists that the new directions will take years to fully implement as historically training is shaped around services.

These concerns are mirrored at an undergraduate level. Common but challenging conditions affecting older people such as dementia and delirium do not prominently feature as core conditions within pre-qualifying curricula (Tullo & Gordon 2013), and students infrequently come into contact with frail older patients during their studies. Recognition of, and ability to manage delirium amongst junior healthcare staff remains poor, despite evidence that such conditions may be preventable (Teodorczuk et al. 2012). Moreover, there is evidence that healthcare professionals continue to hold negative attitudes towards older people and unfortunately see them as burdensome (Tadd 2011; CQC 2012; Teodorczuk et al. 2013). It remains unclear when and how ageism among healthcare professionals arises, and how it can be effectively tackled. Arguably a failure to promote teaching and learning concerning issues pertinent to an ageing population may subsequently foster engrained and out-dated attitudes amongst healthcare professionals post-qualification. In response to this concern, Health Education England (HEE) have stated that “that all undergraduate courses include training in dementia by September 2015” (DoH 2014).
Internationally, there is a recognised tension between specialism and generalism that compromises holistic care for older people (Barnett et al. 2012) and fails to prepare future doctors for the patient group they will encounter. This is raised by the *Shape of Training* report in the postgraduate context (2013), but its causes may lie at an earlier stage of the educational continuum. Put another way, we continue to prepare students at medical school to be specialists when most will later become generalists. Arguably, selection processes that recognise scientific technical merit in preference to holistic psychosocial skills may be compounding the problem. Hence, there is a need to change the expectations of students as to the nature of modern medicine and to encourage them to recognise older people as “core business”.

There is much that medical educators can do to begin addressing these problems. In terms of curriculum development, we suggest that ageing and chronic illness should be integrated as cross-cutting themes, rather than remaining solely under the auspices of geriatric medicine or psychogeriatrics as parent specialties. Medical ethics and professionalism teaching can provide a fertile environment for important discussions about the complex issues arising from the care of older people. Key conditions such as dementia and delirium should be represented in the form of case studies, problem-based learning, and within students’ clinical portfolios. Suggested curricula relevant to older people may support medical schools to integrate an appropriate breadth of content (BGS 2013; Masud et al. 2014). Students should be facilitated to meet and interact with older people, who may be cognitively impaired, in a range of environments including general practice, surgery, acute medicine, and psychiatry.

Educational research has an ongoing part to play. While general gaps in knowledge and skills are evident, the exact nature of students’ learning needs remain under-explored. A review of delirium teaching interventions showed that few investigated or addressed students’ learning needs prior to implementation (Teodorczuk et al. 2010). To provide effective education and training, we must become more informed about students’ knowledge, skills, and attitudes with regard to older people, at all stages of their training. Often, we have focussed on a biomedical knowledge-based curriculum when arguably a more attitudinal and developmental holistic curriculum is required.

Attention to educational theory will support the introduction of effective teaching interventions. There is evidence that interventions about delirium and dementia, underpinned by relevant learning theory and built on sound educational research concerning learning needs do bring about effective practice change at individual, team, and organisational levels (Teodorczuk et al. in press); crucially this intervention placed patients and carers at the heart of the teaching process. Historically, patient and public involvement (PPI) in teaching shows considerable promise (Spencer 2011), yet efforts to involve older, frailier, and cognitively impaired patients remain rare. While there are clearly important ethical issues to be taken into account, older patients and their carers have much to offer medical education, and efforts to involve them should be increased (Hope et al. 2007; Tullo & Gordon 2013).

Moreover, a focus on relevant teaching methods is required. In particular, given the failure of team work as a contributor to safe care of older people, Interprofessional Education (IPE), although logistically challenging, cannot be seen a luxury. IPE in healthcare education has received support from the World Health Organization (WHO) who reported this method of teaching and learning will help to produce a ‘collaborative practice-ready’ health workforce that can better respond to the holistic needs of patients. The *WHO Framework for Action on Interprofessional Education and Collaborative Practice* (2010) emphasised the importance of IPE in a multitude of areas that include up-to-date healthcare delivery, supportive management practices and processes required to change potentially counterproductive culture, and attitudes and policies that may form barriers to optimal practice. Given the growing evidence base for IPE (Hammick et al. 2007, 2009) and in the wake of healthcare scandals that have recently tarnished the reputation of the NHS, it is not surprising, therefore, that IPE is now proposed as an integral training approach to foster a positive culture and safer practice (Barr et al. 2014).

In summary, medical educators have a key role in ensuring that healthcare students possess the appropriate knowledge, skills, and attitudes to care for older people, who comprise an increasing proportion of health service users. Despite organisational barriers to delivering holistic care to older people with multiple and complex co-morbidity, there is much that can be done to begin to change educational structures and introduce innovative practice for the benefit of our ageing population.

We invite medical teachers across all specialty disciplines to refocus their educational activities and meet this 21st century ageing challenge.

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