Physicians as leaders: are we trying to fit square pegs into round holes?

Anthony Montgomery

School of Social Sciences, Humanities and Arts, University of Macedonia, Thessaloniki 540 06, Greece

Correspondence to
Professor Anthony Montgomery, University of Macedonia, Thessaloniki 540 06, Greece; monty5429@hotmail.com

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ABSTRACT

The purpose of medical education has changed over the last 70 years. The modern doctor is expected to be a leader who will be skilled in people management, team working and patient engagement. Moreover, the burgeoning literature on the development of medical leadership competency frameworks as a way to inform curriculum development is evidence of a desire to empower physicians to be healthcare leaders. The movement towards developing medical students as leaders has to be contrasted against the fact that high school exam performance and academic achievement continues to be the primary basis for selection to medical school. Not surprisingly, the smart kids are studying medicine. Unfortunately, there is a person–job mismatch between the initial skills that allows an individual entry to medical school and what the job will actually entail. For example, higher levels of intelligence are associated with less effective leadership styles. Thus, we seem to have a conundrum concerning input and output. In the following paper, I will examine the degree to which we are attempting to remould 'square' physicians to fit them into a 'round' medical landscape. The purpose of the paper is twofold. First, to assess the degree to which we can realistically expect the 'average' medical student to be moulded into a leader, and second, to identify what practical steps we can take to enable medical students to take a leadership role.

The purpose of medical education has changed over the last 70 years. In 1950, Sheehan and Taylor in the USA[1] suggested that the mission of the medical school was threefold: the training of the physician, the search for new knowledge and the care of the sick. Similarly in the UK, Pickering writing in the BMJ in 1956 suggested that '… the primary purpose of the undergraduate medical course within the university is to train the student's mind so that he can collect and verify facts concerning health and disease in man, and so that he can form balanced judgment on issues that affect both individuals and groups'.[2] This individualist picture of a doctor toiling away for the good of science, and by default their patient, has been replaced by a high adrenaline call for physicians to be developed as leaders so that clinicians can be 'change agents' that lead the transformation of heath and healthcare, with the additional idea that leadership training is a bridge to help trainees to find meaning and purpose in medicine.[3] Currently, the modern doctor is expected to be a leader who will be skilled in people management, team working and patient engagement. Moreover, the burgeoning literature on the development of medical leadership competency frameworks as a way to inform curriculum development is evidence of a desire to empower physicians to be healthcare leaders. In the following paper, I will examine the degree to which we are attempting to remould 'square' physicians to fit them into a 'round' medical landscape. The purpose of the paper is twofold. First, to assess the degree to which we can realistically expect the 'average' medical student to be moulded into a leader, and second, to identify what practical steps we can take to enable medical students to take a leadership role.

SO, ARE WE SELECTING THE RIGHT PEOPLE TO BE PHYSICIANS?

The movement towards developing medical students as leaders has to be contrasted against the fact that high school exam performance and academic achievement continues to be the primary basis for selection to medical school.[4] Not surprisingly, students who perform at the highest scholastic levels are being selected to study medicine.[5] Unfortunately, higher levels of intelligence are associated with less effective leadership styles.[6] Thus, we seem to have a conundrum concerning input and output.

There has been relatively little innovation in the way that we select individuals to be physicians. For example, a recent systematic review[7] on selection methods used in medical education highlights the fact that outcome measures used to evaluate selection methods most often focus on indicators of attainment and maximal performance (e.g., medical school achievements, performance in licensure examinations) rather than indicators relating to clinical practice and typical (day-to-day) in-role job performance. That said, there has been a movement towards broadening access to medical schools, with an increased emphasis on non-academic attributes. For example, in Ireland, Australia and New Zealand, applicants to a medical school have to complete a test that seeks to balance logical problem-solving skills with interpersonal understanding. However, the results of such initiatives to date are not encouraging. For example, a recent paper has failed to find any association between selection test scores (including subscales designed to measure interpersonal understanding) and individual variation on psychometric measures of empathy.[8] This research fits with a more worrying trend that some factors (eg, conscientiousness) which are important predictors for undergraduate training, may actually hinder some aspects of performance in clinical practice.[9 10] Such concerns seem to borne out by a systematic review on medical students' attitudes to leadership and management,[11] which revealed that students had a reluctance to report errors or discuss criticism towards role modelling displayed

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by doctors and faculty. Additionally, the review showed while medical students generally have positive attitudes towards multidisciplinary teams, they still believed that doctors should lead the team, suggesting that are less willing to take on the role of the follower in a team.

Currently, the profile of the 'average' medical student is someone with high scholastic performance and high levels of adaptive perfectionism.[12] Unfortunately, the 'average' medical student is also likely to be suffering from depression[13] and burnout,[14] as a consequence of the demands of medical training. Thus, the action of squeezing these square pegs into round holes comes with a considerable cost.

WHAT DOES THE DOCTOR OF THE FUTURE LOOK LIKE?

A review of the future trends expected/advocated in medicine is revealing in terms of the type of individuals that we should be attracting to be physicians. Not surprisingly, the trend is moving towards a protean career model. For example, in the USA, there has been a call for 'value-added' medical education,[15] which involves changing curricula to increase early integrated workplace learning, interprofessional approaches that promote respect of non-clinician providers, professional roles that are learner centred and robust experiential learning experiences. A central element of the approach is 'sharing the care' with non-clinician health team members. Congruently, a recent paper outlines the vision of the American Medical Association Accelerating Change in Medical Education initiative,[16] in which a selection of US Medical schools are developing new experiences for students that immerse them in the healthcare delivery system to experience healthcare through patient centred and team care approaches. In the UK, the General Medical Council in *Tomorrow's doctors* highlights that being a good clinician is not enough, and physicians are expected to offer leadership and to work with others to change systems when it is necessary for the benefit of patients.[17]

A core theme running through all the aforementioned visions of future medicine is the idea that future physicians will participate effectively as leaders and members of teams in healthcare delivery. Additionally, there is a call for medical education curricula to help trainees find meaning in medicine and equip them with the requisite skills to be resilient (against burnout). It is desirable and sensible that we build a vision of physicians enabled to be leaders who support their staff, encourage innovation in terms of cost saving and empower patients. The implications for well-being, performance and quality/safety are obvious. However, the push towards developing leadership skills among medical students needs to take cognisance of the key trends emerging in the science of leadership. For example, there is growing evidence that certain types of leadership can have a 'dark side'.[18] For example, inadequate leadership training can result in toxic workplace environments where the need to establish oneself as a leader surpasses the need to model good leadership behaviours. Congruently, critics are worried that moving from the idea of 'managers' to 'leaders' is a renaming exercise aimed at making the demands of the job more attractive and potentially 'inveigling employees into undertaking tasks which are onerous and beyond the call of duty'.[19] Thus, ignoring the way in which the vision is interpreted has the potential to increase cynicism rather than reducing it.

Thus, future trends in medicine suggests that the pressure on young physicians to take a leadership role will be more intense, not less.

WHAT LEADERSHIP TRAITS SHOULD WE BE FOCUSING ON THE FUTURE?

A burgeoning area of interest within medicine concerns leadership competency models. The basic idea behind such models is that we identify the core competencies needed by leaders in medicine and use this information to redesign medical syllabi to develop such skills.[20 21] Typically, the methodology to develop these competency models usually involves some or all of the following: reviews of the literature, a comparative analysis of other leadership competency frameworks, an analysis of the medical curricula and feedback from important stakeholders. There is no doubt that developing competencies that enhance skills such as working better with others and taking responsibility is desirable. However, in the absence of confirmatory research evidence for such competency models, it appears to represent a wish list of best practices. Therefore, in the following paragraphs, I would like to identify the leadership traits that we should be selecting and training for, by examining the future trends in medicine and reflecting on the behaviours and attitudes that do not fit easily into the present competencies approach to medical leadership.

There will be increasing pressure on our future physicians to connect with and treat members of the older population, with the largest increases in disease burden will occur for those disorders that are particularly strongly age associated (dementia, stroke, chronic obstructive pulmonary disease and diabetes).[22] Unfortunately, there is considerable evidence that ageism is a significant problem within healthcare.[23] The type of ageism that can exist can be quite complex, as evidence by a survey of 1193 UK medical students in 2010 which found positive attitudes towards geriatric medicine per se (eg, 76% associated geriatric medicine with a positive impact on the lives of older people, 54% considered it to involve contact with likeable patients), but significant proportions of the students associated it with unattractive career benefits (eg, 39% associated the specialty with low earning potential, 52% with low prestige).[24] The aforementioned problems concerning ageism is compounded by the growing evidence that physicians demonstrate a significant racial bias in their treatment of particular groups. For example, research suggests that US African–American are less likely to be provided with highly active antiretroviral therapy for HIV/AIDS[25] and less likely to be recommended for revascularisation, independent of the clinical appropriateness of revascularisation and patient demographic characteristics.[26] Physicians are not unique in their ability to discriminate against particular sections of the community. The really interesting question is whether medical schools are 'condemned' to attract a narrow range of individuals whose social and economic backgrounds make them more likely to make certain attributions about particular groups in society. For example, there is significant evidence that for medical schools in UK individuals from less affluent backgrounds are less likely to apply and less likely to gain an accepted offer to study medicine.[27] Physicians have been found to have a less participatory decision-making style[28 29] and to adopt a more 'narrowly biomedical' communication pattern (characterised by dominating communication and high levels of physician biomedical information, with closed-ended question asking), especially when comparing non-white and white patients.[30] The aforementioned effects are most pronounced when physicians perceive a significant difference in status and social value between themselves and their patients. Such a gap is set to continue given the profile of individuals studying medicine.

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However, the drive to develop physicians as leaders presents an opportunity to put discrimination and prejudice on the agenda. Expecting individuals to be leaders can mean expecting them to be self-aware and model behaviours that reduce the impact of bias. Additionally, medical leaders exploring and discussing 'cognitive mistakes' can prepare teams for discussions about uncertainty and medical error.

SO WHAT IS THE RESULT OF FITTING SQUARE PEGS IN ROUND HOLES?

If the reader has been persuaded that there is a person–job mismatch between the initial skills that allows an individual entry to medical school and what the job will actually entail, then it logically follows that this mismatch is a significant contributor to stress that an individual can feel when they are thrust into a situation with high demands and few resources. Consequently, ongoing chronic stressors contribute to the fact that physician burnout rates have reached epidemic levels.[31] Burnout has become a major problem within the field of healthcare. Burnout is associated with sleep deprivation,[32] medical errors,[33] poor quality of care[34] and low ratings of patient satisfaction.[35] Indeed, for US surgeons, burnout and depression were among the strongest factors related to reporting a recent major medical error.[36] Inadequate work–personal life integration is a significant issue for physicians, compared with the general population and the notion that younger physicians need to sacrifice their personal/family life for their career exacerbates burnout and fatigue.

Physicians are educated to be clinicians first, and their role as a leader, team member or manager are secondary. Thus, the majority of physicians have a tendency to view the purpose of their healthcare setting as primarily to support their clinical work. Not surprisingly, this generates a disconnect between their training/expectations and the realities of their need to work with co-workers and patients who have different visions of how the organisation (health setting) should operate. This disconnect means that job burnout is a significant risk.[37]

The fact that such high percentages of physicians report symptoms of burnout suggests that there is a significant problem with the job–person fit, and this problem will not be ameliorated if the response of healthcare organisations is to focus on individual-focused solutions (eg, extended leave, mediation, psychotherapy). Such solutions locate the responsibility for solving the problem with and within the physician, which is a double burden. These trends suggest that the pressure on the square pegs to fit the round holes will increase.[38]

SO WHAT CAN WE DO?

Once we acknowledge that there is a mismatch between the types of individuals who are attracted to studying medicine and the actual demands of the job, there are many practical things that can be done to support medical students to develop as leaders.

First, there needs to be a fundamental redesign of how leadership is introduced in healthcare organisations, especially for medical residents and young doctors. There needs to be a recognition that building leadership skills is best served by a gradual and evolved introduction into a work environment. At a practical level, early career doctors (those in specialist training) report that the development of management and leadership skills comes second to the demands of shift working, frequent rotations and gaps in professional training.[39–41] We need to weigh the opportunity cost of not adequately preparing physicians for the rigours of medical practice. It has been estimated that medical errors, if properly measured, would constitute the third biggest killer in the USA,[42] and it is not extreme to suggest that such behaviours have their roots in environments that do not embrace opportunities to reflect on work practices and develop leadership behaviours appropriately. Adopting a longitudinal approach to properly developing leadership skills fits with the evidence that we need to take a long-term view with leadership development. It has been estimated, using the literature on expertise and expert performance, that it generally takes 10 years or 10 000 hours of dedicated practice to become an expert in a given field.[43] Therefore, it is highly unlikely that participation in ad hoc programmes, workshops or seminars can lead to meaningful leadership development. As noted by Day *et al*,[44] the actual development of leadership takes place in the so-called white space between leader development events.

Second, leadership development, in terms of self-care, has the potential to unshackle medical students from a dysfunctional 'superhero' role that they are forced into. For example, students suffering from burnout and depression are unlikely to seek help due to fears about discrimination and confidentiality breaches.[45] There is a stigma associated with seeking help, and such feelings drive inappropriate self-treatment among physicians and medical students. So, at a very practical level, senior colleagues need to model help-seeking behaviour for younger ones. This could be integrated within clinical review meetings. Anything less than this is likely to be viewed as tokenistic and fail.

Third, there is a need to learn from the limited success of attempts to incorporate management and leadership competency frameworks within medical curricula. For example, the National Health Service Institute for Innovation and Improvement and Academy of Medical Royal Colleges have developed the Medical Leadership Competency Framework, which includes a focus on five areas for the development of medical curricula, demonstrating personal qualities, working with others, managing services, improving services and setting direction.[46] However, the impact of the framework in leading to 'better' leadership is questionable. While the UK has developed a specific medical (and general) leadership framework, it has not resulted in more doctors in senior decision-making positions (ie, on hospital boards) in comparison with other countries.[47] Congruently, the adoption of a framework does not necessarily translate directly to work practices, as its influence is more related to teaching methods, with the content of teaching still largely focused on leading clinical teams and little attention given to more organisational and managerial issues.[48] Interestingly, there is even a concern that changing medical education to incorporate such values is a way of normalising managerial and organisation values and priorities which will ultimately prove to be at the expense of professional ones and detrimental to the profession and patients.[49] The rush to develop competency-based frameworks for leadership development within medical curricula runs the risk of being more aspirational than realistic. As noted by Day *et al*, 'Rather than focusing on implementing better instructional design or putting together what we hope are more impactful developmental interventions, it might be more productive to take a step back and focus on what happens in the everyday lives of leaders as they practice and develop' (p 80).[43] For example, in the induction period, it might be useful to focus on monitoring and evaluating the ability of young doctors to demonstrate a restricted number of leadership skills that are useful in clinical practice, such as championing new ideas, influencing co-workers, persuading and making sense of initiatives for their colleagues .[50 51] Setting the bar low and attainable at the beginning will result in the dual benefit of allowing physicians to experience the benefit of

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leadership development and prepares the groundwork for later more complex leadership skills development.

CONCLUSIONS

The purpose of this paper is recognise the fact that the individuals attracted to studying medicine may not be the people most suited to developing as leaders who promote a shared leadership style within healthcare. Recognising this fact can enable us to constructively lower the expectation bar and develop a more grounded approach to leadership development. Building systems where organisations initially take responsibility to protect new leaders provides the correct model for future leaders. It is not an accident that young physicians who report that their training period resembled a form of organisational 'hazing' go on to reproduce exactly the same behaviours when they occupy senior positions.

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