



Leadership in Medical Education: A Review

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Abstract

To meet the challenges of our modern health care system, there have been increasing calls for physicians to develop the capabilities to lead health care transformation. The key to building high-quality healthcare is inculcating good medical leadership amongst residents and future healthcare professionals. As compared to technical and academic skills, leadership skills are not given that much importance in medical education. To meet the current transformation of health care leadership skills are needed to be incorporated in the medical curriculum as leadership skills help develop better physicians. Besides, it also seems to be imperative to begin leadership education in the earlier years of medical training so that they can lead as physicians with better skills in the health care system. Along with lecture and lecture-based programs, practical experiences are also important. There are several activities carried out in the medical profession that requires proper management. But due to a lack of leadership skills physicians fail to manage it properly. So, they need to be appropriately trained during their medical schooling.

Leadership has been shown to increase thinking power, skills, and actions, which delivers good quality healthcare services and enhances our healthcare system and in turn, patient care. These skills can be obtained through enough experience in teamwork under the supervision of teaching staff. Hence medical leadership skill plays an important role in medical education. In this review, the goal is to throw some light on the importance of incorporation of leadership in Medical Education.

Keywords: Leadership, medical education, physicians, Healthcare, clinicians, medical doctors.

Introduction

Modern healthcare structures are facing lots of challenges in recent times, which have raised a concern about imposing management talents on clinical educators. [1] There have been numerous calls to extend leadership development to the training of physicians. [2-3] Over the years, healthcare has been experiencing a profound transformation in terms of all of its sectors, thus implying a definite change is the crux of the healthcare system, which is health education. Leadership forms one of the integral components in cultivating better physicians of tomorrow.

Observational data have suggested that patient outcomes are improved with physician leadership. [4] Clinical schooling encompasses a wide range of activities such as coaching, learning, assessment, managing teams, and programs. [5] All these activities require some form of management. Internationally, medical doctors are being called upon to require greater active engagement in the management and control of clinical services. This caused a greater emphasis on ensuring that clinical college students can comprehend and be a part of such leadership programs. [5] Leadership has been shown to increase thinking power, skills, and actions, ultimately leading to the delivery of quality healthcare services and enhancing our healthcare systems and patient care. [6]

It is crucial to realize that leadership has to be equally shared among medical, clinical, and managerial professionals who add partnerships to deliver high-quality care. But at the international level, there is a considerable variation. Doctors are considered the leaders of the clinical teams. [7]

To construct the best healthcare leadership is important to fulfill the desires of healthcare in the twenty-first century. Competent leaders are vital across all health professions, including allied health, nursing, pharmacy, dentistry, and medicine. [8] Consequently, the incorporation of leadership training and development should be a neighborhood of all healthcare provider curricula. [8] Nearly all physicians tackle huge management obligations throughout their careers. However, in contrast to other careers in which control talents are crucial, physicians are neither taught to lead nor are they normally rewarded for correct management. [9] Even though clinical establishments have designated a middle clinical competency, management talents are not often taught and strengthened throughout the continuum of medical training. [9]

More evidence suggests that leadership skills and control practices have a significant impact on both patient and healthcare enterprise outcomes. [9]

Thus, it becomes clear that leadership schooling must be officially incorporated into medical and residency schooling curricula. [9]

Likewise, research on academic leadership, especially that from outside of Europe, emphasizes the importance of getting institutional leaders closely concerned with superior academic programming. [10] Excellent leadership skills are required to ensure the availability of high-quality patient care. [10] Incorporating leadership skills into students while they pursue their courses will enhance team functioning, improve the learning environment, and will ultimately improve the health provision system. [11]

Practice-based learning and improvement of interpersonal and communication skills, and systems-based practice are leadership skills that should be incorporated into medical schooling or in training programs. [12]

In this review, the goal is to throw some light on the importance of incorporation of leadership in Medical Education.

Methodology:

The literature review for this work was conducted after a comprehensive investigation in reputable databases such as PubMed, Research gate, PMC Articles and Google Scholar. Key index words used for this literature review were Leadership, medical education, physicians, Healthcare, clinicians, postgraduate, medical doctors.

Inclusion criteria: The date of publishing until September 2021 was chosen as an inclusion criterion. In order to collect data, only English-language sites were used. Case reports and research articles from reliable sources were included in the studies, and their credibility was determined by their publisher.

Exclusion Criteria: Studies published in other languages were not included. Only credible research papers were included. As a result, any research papers that were not published in peer-reviewed journals were not examined. Articles that did not clearly address the application of leadership in medical education were eliminated, and only relevant articles that matched the inclusion criteria were utilized as references. Ultimately, the major goal was to acquire high-quality data.

Leadership Education in Healthcare Sector:

The healthcare system is continually evolving, and it is confronted with numerous issues such as funding restrictions, increased accountability, changes in patient populations, and increased regulations. [13] This has led to the conclusion that, in order to improve health, academic health centers must create leaders at all levels of organization and systems. [13]

Incorporation of leadership coaching in medical schooling can turn out to be a very important method for achieving respective goals, fostering resilience among future healthcare professionals, and benefit not only the workers in the health sector but also their families, patients and broader communities. [14] In addition, there has been a renewed push to develop leadership skills in medical students, beginning early in their careers and continuing throughout their careers, so that they can take on more important leadership responsibilities within the healthcare system in the near future. [15]

To be an effective leader, leadership abilities should be cultivated earlier in medical training. [16] Medical schooling at the undergraduate level focuses on the diagnosis & management of diseases with very little emphasis on the systemic issues surrounding the provisions and the outcomes as well as the teamwork required to deliver safe and prime quality healthcare to the community. [16]

Leadership skills are not well developed at the undergraduate level and currently, there is limited literature available supporting the same so as to incorporate them into the curricula. [17] One survey showed that an outstanding 85% of medical students thought that they must be taught leadership and teamwork skills in their grad school. [17] A specific leadership curriculum including role play, team training, community experiences, student leadership opportunities, participation in quality improvement projects, and mentored leadership development plans are potential ways to spice up under the current education system thus leading to future healthcare professionals becoming adept physicians through the medical education leadership training. [18]

The Accreditation Council for Graduate Medical Education (ACGME) recognized practice-based learning and improvement, interpersonal and communication skills, and systems-based practice as core competencies, all of which contain elements of leadership qualities. [19] The Can MEDS agenda hired by the Royal College of Physicians and Surgeons of Canada renamed the role of “manager” to “leader”, thus paving the way for the incorporation of leadership training under the realm of medical education. [20] The Academy of Medical Royal Colleges started a Medical Leadership Competency Framework (MLCF) composed of 5 categories: demonstrating personal qualities, working with others, managing services, improving services, and setting direction. [21] These examples show the support of graduate medical education (GME) accrediting bodies for inculcating leadership training for residents. [21]

Mostly, our teaching system in healthcare is predicated on certain guidelines, in other words, we are taught to form guideline-based decisions and hence it becomes a tad bit difficult in managing medical situations that tend to fall outside of the linear guidelines. [22] Experiences say that teaching method that affords medical students limited responsibilities in clinical higher operation, which are then vetted by senior clinicians greatly improve confidence. [22] An illustration for this idea would be a general practitioner setting where they are encouraged to determine their own patients, make a well-informed diagnosis and complete a management plan pending approval from a senior MD. [22] This approach might be translated to medical management, where students are given limited responsibilities for deciding under tutelage from those within the sphere. [22] In order to attain this, implementation, and encouragement of leadership in medical education is crucial. [22]

Discussion:

A physician's involvement in leadership and management has a beneficial effect on the health delivery system and concomitantly the quality of patient care. [23] If today's medical students are well educated regarding leadership skills, tomorrow's doctors will become well equipped with the skills essential to delivering quality healthcare services and also might pique interest amongst these young inquisitive minds to get more engaged in leadership and management systems. [24]

In spite of the development of leadership education initiatives for first-year doctors, evidence of such developments at the undergraduate level are even more limited. [24] A recent study identified leadership as one of the key skills for undergraduate community-based education for health professionals. [25] On the contrary, some studies reflect obstacles to teaching leadership, specifically to the undergraduate medical syllabus, including variability of leadership practices and lack of consistent and deliberate practice in the field. [26]

The problem in undergraduate medical education is the compromise between adding more content into an already content condensed education. [27] In one of the studies from the University of Michigan, it was found that there was limited success in an experimental required curriculum for all students which may signal those integrated efforts may not produce the most robust response to the training that is usually expected. However, it is important to consider the fact that despite poor performances, students were still wanting to receive this type of education and training on the whole. [28]

A study reported from Ghana searched the importance of role modeling on the event of leadership skills, and the way role models impact students' perception of important leadership skills. [29] Finally, a survey of US grad school deans revealed various leadership development opportunities, including dual degree programs, workshops, lectures, seminars, and non-curricular options like committee work, student organizations, service projects, and volunteer and teaching opportunities. [30]

An article published in 2011 identified areas of essential medical leadership and management skills for undergraduate medical education, including quality improvement, managed care, use of resources and healthcare cost, doctor's role, patient safety, and general leadership and management. [31] To implement the above qualities, medical students want increased training but lack the time to effectively participate and reap benefits from them. Some of them also tend to show disinterest in certain areas. [32] The solution to resolve this can be to utilize a module-based system in which the learning is more self-paced throughout undergraduate medical education. This method was implemented by the University of Newfoundland. [33] But the study concludes by calling for more research on the topic and more investigations into the best approaches to leadership development for medical students. [34]

In another, a more recent review of 11 studies from 2018, the authors again concluded that there is limited evidence of effectiveness in the studies they examined ranging from the years 2000–to 2014. [35] This review also summarized a lack of objective and long-term outcomes, as well as a standard framework for the evaluation of these problems.

Besides, it is crucial to understand the fact indicated by the workforce data is that several experienced clinicians and healthcare educators will retire over the following ten years. [36] This means that the need for effective succession planning and leadership training is well recognized with a current shortage of emerging leaders entering into leadership roles being highlighted. [37,38,39] Effective leaders must be nurtured and supported by the organizations from which they are being educated, trained as well as in the institutes they work in. [40] So it is of utmost importance to introduce the subject of leadership as a key curriculum area. [41] Leadership development, assessment and feedback are necessary throughout the education and training of health professionals. [41] Aspiring and current leaders are often identified, trained, and assessed through formal leadership development programs, and through supportive organizational cultures. [41] It needs embedding leadership training programs, opportunities for leadership practice, and promotion of professional networks within and beyond the organization. [41] The significance of mentorship within healthcare education is well recognized, offering a method to further enhance leadership and engagement within the workforce. [42]

There is a lack of focused attention toward the development of leadership capabilities in trainees. Proof suggests that leadership quality affects patients, healthcare system outcomes, and finances alike. [43] As an example, hospitals with higher-rated management practices and more highly rated boards of directors are shown to deliver higher quality care and have better clinical outcomes, including lower mortality rates. [43] Enhanced management practices have also been related to higher patient satisfaction and better financial performance by not only the clinicians but the whole healthcare staff. [43] Success in leadership additionally affects physician well-being, with stronger leadership qualities indirectly related to less physician burnout and better satisfaction. [43]

These advantages are crucial in a healthcare landscape that is increasingly focused on measuring and achieving high care quality, which is characterized by high rates of burnout across clinical personnel, and that is asking physicians to steer larger, multidisciplinary teams of nurses, social workers, physician assistants, and other health professionals towards a positive direction. [43]

There are so many opportunities for medical students to get involved in activities that may help in developing their leadership skills, from quality improvement [44] to structured programs; these may be achieved either within an educational program or through specific day trips of coaching. [45] However, as per the expectation of all the members of our community to own critical reading skills and to grasp research, with some taking additional opportunities to achieve a far greater understanding of research, it is plausible that with the leadership we want to and can effectively form the opportunities for all the students and trainees to be told a way to manage themselves and lead a team with some trainees helping them acquire those extra skills required for being successful under corporate leadership. [46]

Despite these advantages, leadership and management are viewed cynically by some clinicians; inappropriate and careless remarks, like moving to the dark side, are sometimes made about trainees assuming who are willing to or actually developing leadership skills. [46] Comments like these are reminiscent of the hierarchy of specialties within the profession and are frequently fueled by the lack of proper understanding. [46] The power

to assimilate the data to succeed in a working diagnosis and agree upon a treatment plan and measures of improvement is comparable to the power to spot and assess issues creating a management problem and agree on an action plan and measures of change. [46] Furthermore, the skill set needed to influence others to vary behavior whether or not they are patients or team members – are the same: active listening, negotiation and influencing. [46] An alternative approach that is unlike the usual one, towards leadership and management is at the best unhelpful and, if left unchecked, most definitely creates a rift between the healthcare professionals as well as the health service managers. [46]

At the international level, to be specific, across the United Kingdom, most local Health Education England offices and deaneries have created local opportunities to have interaction in leadership activities. [46] Additionally, there are national programs like the Faculty of Medical Leadership and Management (FMLM) Clinical Fellows Program and the chief registrar project at the Royal College of Physicians. [46] These offer medical students the opportunities to dabble themselves in national organizations, contributing towards projects focused on developing leadership skills. There are other opportunities that can be highlighted here as well: many trusts offer leadership development to all or any new consultants; the FMLM offers development for General Physicians usurping leadership roles and much of parts of the United Kingdom offer learning sets and specific leadership programs. There also are national programs like those offered by the Leadership Academy and King's Fund. [46]

In medical, leadership is best learned through practical experiences. Classroom lectures and lecture-based programs will only provide theoretical knowledge. [46] For several trainees and students, the important aspect of leadership development will still be the abilities and behaviors necessary to figure effectively with others. These include the facility to delegate, negotiate, support, and motivate, additionally to the talents necessary to acknowledge error as well as the act to correct it. [46]

Various skills are needed to become a leader. A comparative analysis of grad school leadership job postings from 2000-2004 and 2010-2014 showed that there was a difference within the posting language with an increased concentrate on collaboration, clarity, community-controlled, accountability, and teamwork, highlighting the changing skills needed in medical education. [47] Further, for girls in leadership positions, tenured faculty cited individual skills and actions to facilitate development, including mentorship and institutional support for diversity and inclusion because the key factors in becoming successful leaders. [48] There are remarkable impacts for medical students on their acquisition of leadership skills or lack thereof. [49] In a paper, while discussing the sort of leadership development skills, medicine residency directors are attempting to specifically find a variety of various leadership development tools as a necessary component of a hopeful medicine resident. [49] Different methods like serving on the school of medication committees, student grouping involvement, involvement in organized medicine, and dealing on, and completing, projects were a variety of the examples listed as beneficial for leadership growth. [49] Yet, those gaps still persist into residency. During an inspection of medicine residents at Massachusetts General Hospital, resident physicians reported needing more experience in “leading a team”, “confronting problem employees”, and “resolving interpersonal

conflict. [50] The foremost frequent ways they hoped to attain those skills were through interactive methods like case discussions, small discussions, simulation, and lectures. [50]

The Healthcare system is dynamic and changing in tremendous ways. Hence, it is critical for the physicians to develop leadership skills to assist as well as receive appropriate guidance in this transformation. For this, there is a need for well-designed and well-evaluated leadership curricula. Healthcare education leaders are required to figure effectively and collaboratively across various disciplines and organizational boundaries, where titles do not seem to be always linked to leadership roles but may occur in everyday work. Good leadership also means knowing when, and about the proper way to support others in their endeavors. Leadership curriculum at the medical education level focuses on a large range of abilities but is often not intended to be per the existing leadership competency framework.

Future physician leaders have to be trained throughout the sphere of education and in lifelong learning. Medical education provides a perfect environment for laying the inspiration for leadership competencies, like system thinking training, team collaboration, communication skills, quality improvement, and insurance systems. In the long run, it is imperative for healthcare education leaders to demonstrate excellence in teamwork, clinical skills, patient-centered care, and responsibly balance accountability with autonomy.

Conclusion:

With this review, it is also important to highlight the fact that further research is critical to review optimal teaching and assessment methods in medical education leadership curricula. There is also a need for in-depth qualitative and quantitative studies to characterize the prime appropriate leadership competencies on an annual basis of medical schooling and also the impact of such a curriculum on future leadership outcomes. With more thorough research supporting this ideology, leadership education can definitely pave a way for healthcare professionals to become more equipped with the skills that they can use to dispense top-notch health services.

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