

PERSPECTIVE

Therapy Area: Other

The role of interdisciplinary education and practice in medicine during the COVID-19 pandemic

Since the beginning of the teaching process in modern medical schools, the evolution of medicine brought up the need for medical education to also evolve. We passed through the ages of the theatres where surgeries and lectures were performed, and the teachers were the main source of knowledge until today with technology, simulation-learning and evidenced-based medicine when information comes from multiple sources so it is important to filter to achieve reliable conclusions.¹⁻³

Medicine evolution also allowed us to confirm and refute hypotheses, discover new drugs and technologies, understanding better the pathophysiology and consequently adequate treatment of many diseases. Thus the knowledge has been increased in all medical areas, and it required doctors to study more specific subjects to better understand its implications. That way, traditionally recognised areas in medicine originated subareas of knowledge capable of generating more hypothesis and developing higher-quality evidence.^{4,5}

As so, the referral of patients to specialised doctors in subareas of medicine became the gold standard of patient care. However, most of the time, one patient needs an approach from different specialised doctors, who—unfortunately—do not interchange their expertise to individualise one's treatment and therefore do not give the best care to the patients.⁶

Furthermore, globalisation has affected medicine and healthcare systems to a great degree. While in the past centuries it could take almost one year for an infectious disease to spread across continents—as seen in the influenza epidemic—we have recently seen the outbreak of coronavirus disease 2019 (COVID-19) escalate to a pandemic within 5 months hitting over 212 countries.⁴ Suddenly, many specialist doctors found themselves in a situation they had not faced for a long time: having to treat patients out of their subarea of expertise. The possibilities of teaching and learning through the modality of webinars—due to the imperative of social distancing—brought to these days the urgent need for teamwork and interdisciplinary approach for patient care, taking advantage of multiple areas of knowledge.^{7,8}

The question is: have we been doing it all wrong when we have become “super-specialists”? We think not! With the exponential increase in the quantity of available information and the speed at which data can be accessed and analysed it is impossible to be aware of every new content in all medical areas.

The lesson that COVID-19 pandemic brought to us was the urgent need for the interdisciplinary approach to treating better our patients, and not only each individual disease that they present. Even though this concept is not new, in the current era, it became

difficult to find teamwork in medicine. The Heart Team (multidisciplinary approach for cardiovascular disease patients) is a great example regarding this issue. Experts have been proposing teamwork as the gold standard to establish a better strategy to treat patients with complex cardiovascular disease patient, however, the effective Heart Team implantation around the world remains a challenge.^{9,10}

Ahmed et al described the example of the process of fast switch to digital platforms seen in rheumatology education during the past year, with the cancellation of face-to-face events and limitation of training hours, which forced trainees to continue their studies online. Important resources, such as virtual libraries, social media for knowledge-sharing and mentoring programmes dedicated to research activities have helped to overcome existing barriers for medical education in this current scenario.¹¹

From the perspective of undergraduate medical students, a qualitative study has also shown that the unplanned shift to digital learning because of the sudden closure of educational activities across the world was well-received, with the agreement that online sessions were time-saving and contributed to optimising time management and learning of theoretical subjects, improved by the ease of lecture recording and the decrease of campus-based distractions. On the other hand, some challenges have been pointed out regarding individual behavioural characteristics, limited non-verbal communication, varied technological obstacles and issues in ensuring the quality of the content delivered.¹²

Telemedicine during the COVID-19 era taught us so much. We must review our traditional approach to medical students, residents, colleagues and patients in which we became stuck to distance and time obstacles. We must use the technology on our behalf to spread knowledge among colleagues and to offer the best treatment and follow-up for patients. We live now in the Medicine 4.0 era.¹³ As Darwin a long time ago proved: we must evolve!

DISCLOSURE

The authors declared no conflict of interest.

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