The Medical Journal of Australia – Preprint – 14 May 2020

The impact of COVID-19 pandemic on medical education

Adrienne J Torda
Associate Dean Education and Innovation
University of New South Wales
Office of Medical Education
Randwick, New South Wales
Australia

Gary Velan
Senior Vice Dean Education
University of New South Wales
Office of Medical Education
Randwick, New South Wales
Australia

Vlado Perkovic
Dean
Faculty of Medicine
University of New South Wales
Office of Medical Education
Randwick, New South Wales
Australia

Abstract

Even prior to the COVID-19, like many other medical schools, we have been examining the ways in which we can adapt our medical program to utilise new technologies better, engage and enhance the student experience and really teach the skills that future doctors will require. These go well beyond a knowledge of basic science and include complex functional skills such as teamwork, reflective practice and adaptive problem solving. The COVID-19 pandemic required a massive and rapid change in the way we deliver medical education, particularly to the junior years of the medical program. Whilst 'online' learning has limitations, it is important that we springboard on the advances made during this period to continue to improve our medical programs.

The Medical Journal of Australia – Preprint – 14 May 2020

Letter to Editor:

Prior to the COVID-19 pandemic, we had been thinking about how best to re-imagine our medical program to enhance the student experience and learning outcomes. Globally, questions have been raised regarding utility and format of the pre-clinical content taught in medical programs in the junior years¹, particularly lectures, which have increasingly low attendance rates. There is emerging evidence that blended approaches to education meet the connectivity, flexibility and interactivity expectations oflearners² and have potential to combine the best of both online and face to face teaching. Packaging content in digestible chunks combined with active learning activities online such as adaptive tutorials, discussions and reflections, results in more meaningful educational experiences for students than didactic lectures^{3, 4}.

The COVID-19 pandemic forced a rapid transition to entirely online teaching for junior medical students. Even components of clinical teaching had to proceed in this format (other than physical examination). Despite the pace of this transition, both formal and informal student feedback indicated that students have an extremely high level of satisfaction and engagement with online learning activities. The clinical training components of the program have, by necessity, also become more streamlined.

COVID-19 has forced us to examine all elements of our medical program. This is an opportunity to review to the curriculum for future doctors, especially alignment with the skills and capabilities they will need in their careers. Clearly, we need to facilitate the development of teamwork and communication skills, which will prepare students for effective patient care and multidisciplinary, interprofessional practice. Additionally, we have an obligation to support medical students in developing skills in reflection, adaptive problem solving, leadership and life-long learning, all of which are needed to adapt to a rapidly changing healthcare environment⁵.

Some important aspects of university life such as such as friendships, personal identity development, exposure to diversity and self-care skills will be much harder to achieve in a solely 'online' environment, but as we develop plans to re-introduce elements of face to face teaching, we need to ensure that these are integrated with, and informed by, the advances made in medical education during the past few months.

References:

- 1. Emanuel EJ. The Inevitable Reimagining of Medical Education. JAMA. Published online February 27, 2020. doi:10.1001/jama.2020.1227
- 2. Roberts DH, Newman LR, Schwartzstein RM. Twelve tips for facilitating Millennials' learning. Med Teach. 2012;34(4):274–278.
- 3. Herbert C, Velan GM, Pryor M. et al. A model for the use of blended learning in large group teaching sessions. BMC Med Educ. 2017;17(1):197. https://doi.org/10.1186/s12909-017-1057-2.
- 4. Garrison DR, Kanuka H. Blended learning: uncovering its transformative potential in higher education. Internet High Educ. 2004;7:95–105.
- Klasko S. Burned Out: Learners, Physicians, and Systems. Paper presented at: Learn Serve Lead 2019: The AAMC Annual meeting, Nov 8-12, 2019: Phoenix, Arizona. https://event.crowdcompass.com/lsl19/activity/LaL0t0A9cc, accessed May 5th 2020.