

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Exploring the Efficacy of Implementing an Online Interventional Radiology Course to Medical Students During COVID-19

From:

Joshua Kader

From the King's College London, Faculty of Life Sciences and Medicine, 21 Overbury Avenue, Beckenham, Kent, BR3 6PZ, United Kingdom.

I read with great interest the article entitled "Medical Student Education During the COVID-19 Pandemic: Initial Experiences Implementing a Virtual Interventional Radiology Elective Course"(1), especially as a fourth-year medical student who has just completed a BSc: Radiological Imaging Sciences-intercalated degree (iBSc) in 2019/2020 in the United Kingdom. The constraints of the pandemic resulted in my completion of the degree online, thereby affording me the lived experience and a deep insight into the participants' journey of DePietro et al's study.

It is widely known that Interventional Radiology (IR) is significantly underrepresented within medical school curricula, resulting in a shortage of IR practitioners, thus limiting the therapy options available to patients (2). The authors emphasize the value of increasing the presence of IR within the medical student curriculum and in response to education provision during the pandemic, facilitated a structured and innovative 2-week online IR elective course. Anonymous pre- and postcourse surveys were administered to ascertain the participants' perceptions of the module's educational value, their residency choices and to identify whether students' interest in IR had changed.

The authors describe that the course was applied in two consecutive iterations with five participants in each. The survey results comprise combined findings from both iterations (Fig. 1). The merged findings beckon clarity as it leaves one curious to whether there was a significant disparity between the participants' contribution toward survey results between iterations. To establish the educational rigor and generalizability of the course, it would have been beneficial to explore the differences in "educational value," "understanding of IR" and "interest in IR" between these two iterations.

The postcourse survey requested data on participants' preferred teaching formats from this study, however, there may be merit in also capturing this data in the precourse survey. The participants have experienced 3–4 years of medical

Letter to the Editor

school education and are likely to have developed preferences on teaching styles that best suit their learning. Identifying a correlation between pre- and post-teaching preferences would be insightful. This potential finding would advise the authors that IR teaching could integrate effectively into medical school curricula as it can be taught in a format that is preferred among students (3).

Finally, it is commendable that participants were granted the opportunity to make suggestions to improve this course, thereby supporting the longevity of the study. DePietro et al., may consider including teaching strategies such as critical appraisal (4), essay writing and clinical scenario simulations (5) which are evidenced to engender a conducive and effective learning experience. Moreover, this suggestion is also based upon my recent experience of completing an iBSc degree which has augmented my skills in the aforementioned components. My research capabilities and critical analysis were developed whilst simultaneously attaining a deeper understanding of radiology. These invaluable attributes would most likely not have been acquired, had the course only comprised lectures and case base discussions.

The relevance of IR in our current medical climate is compelling and it is thanks to research such as this that allows the awareness of IR to journey alongside that importance (6). As such, the authors' undertaking in devising an online course with a promising response rate amidst the constraints of COVID-19 is admirable and I look forward to the results of their future endeavors.

REFERENCES

- DePietro DM, Santucci SE, Harrison NE, Kiefer RM, Trerotola SO, Sudheendra D, Shamimi-Noori S. Medical student education during the COVID-19 pandemic: initial experiences implementing a virtual interventional radiology elective course. Academic Radiology 2020; 28(1):128–136
- Royal College of Radiologists. Provision of interventional radiology services, Second Edition. 2019. https://www.rcr.ac.uk/system/files/publication/filed_publication_files/bfcr(19)8-provision-interventional-radiology-services-second-ed.pdf. Accessed January 1, 2021.
- Shaikh M, Shaygi B, Asadi H, et al. The introduction of an undergraduate interventional radiology (IR) curriculum: impact on medical student knowledge and interest in IR. Cardiovasc Interv Radiol 2016; 39(4):514–521.
- Horsley T, Hyde C, Santesso N, Parkes J, Milne R, Stewart R. Teaching critical appraisal skills in healthcare settings. Cochrane Database Syst Rev 2011(11).
- Theodoulou I, Louca C, Sideris M, et al. A prospective study integrating a curriculum of interventional radiology in undergraduate education: a tetracore simulation model. CVIR Endovasc 2020; 3(1):1–7.
- Baerlocher MO, Asch MR, Puri G, Vellahottam A, Myers A, Andrews K. Awareness of interventional radiology among patients referred to the interventional radiology department: a survey of patients in a large Canadian community hospital. J Vasc Interv Radiol 2007; 18(5):633-e1.

https://doi.org/10.1016/j.acra.2021.01.033