The Use of Online Multimedia Platforms to Deliver a Regional Medical Schools Finals Revision Course During the COVID-19 Pandemic

Authors : Matthew Edmunds, Andrew Hunter, Clare Littlewood, Wisha Gul, Gabriel Heppenstall-Harris, Thomas Humphries Abstract : Background: Revision courses for medical students undertaking their final examinations are commonplace throughout the UK. Traditionally these take the form of a series of lectures over multiple weeks or a single day of intensive lectures. The COVID-19 pandemic, however, has required medical educators to create new teaching formats to ensure they adhere to social distancing requirements. It has provided an unexpected opportunity to accelerate the development of students proficiency in the use of 'technology-enabled communication platforms', as mandated in the 2018 GMC Outcomes of Graduates. Recent advances in technology have made distance learning possible, whilst also providing novel and more engaging learning opportunities for students. Foundation Year 2 doctors at Aintree University Hospital developed an online series of videos to help prepare medical students in the North West and byond for their final medical school examinations. Method: Eight hourlong videos covering the key topics in medicine and surgery were posted on the Peer Learning Liverpool Youtube channel. These videos were created using new technology such as the screen and audio recording platform, Loom. Each video compromised at least 20 single best answer (SBA) questions, in keeping with the format in most medical school finals. Explanations of the answers were provided, and additional important material was covered. Students were able to ask questions by commenting on the videos, with the authors replying as soon as possible. Feedback was collated using an online Google form. Results: An average of 327 people viewed each video, with 113 students filling in the feedback form. 65.5% of respondents were within one month of their final medical school examinations. The average rating for how well prepared the students felt for their finals was 6.21/10 prior to the course and 8.01/10 after the course. A paired t-test demonstrated a mean increase of 1.80 (95% CI 1.66-1.93). Overall, 98.2% said the online format worked well or very well, and 99.1% would recommend the course to a peer. Conclusions: Based on the feedback received, the online revision course was successful both in terms of preparing students for their final examinations, and with regards to how well the online format worked. Free-text qualitative feedback highlighted advantages such as; students could learn at their own pace, revisit key concepts important to them, and practice exam style questions via the case-based format. Limitations identified included inconsistent audiovisual quality, and requests for a live online Q&A session following the conclusion of the course. This course will be relaunched later in the year with increased opportunities for students to access live feedback. The success of this online course has shown the roll that technology can play in medical education. As well as providing novel teaching modes, online learning allows students to access resources that otherwise would not be available locally, and ensure that they do not miss out on teaching that was previously provided face to face, in the current climate of social distancing.

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