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Correspondence: Letter to the Editor



Assessing current undergraduate orthopaedic education: In response to Giordano et al.

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Dear editor,

We read with interest the article 'Impact of COVID-19 on Undergraduate and Residency Training'. ¹

As London medical students, we, as stated by the authors, experienced upheaval in our surgical teaching first-hand. Lectures were converted to webinars, clinics replaced by virtual scenarios and theatre time substituted for online demonstrations. Albeit in a different fashion, the Virtual Learning Environment (VLE) provided a clinical context to our learning, and we agree with authors' view that students "can benefit from the considerable resources offered by virtual learning and independent study".

Using a survey instrument, we attempted to quantify the effectiveness of the VLE and the impact of COVID-19 on Trauma and Orthopaedics (T&O) teaching at a Finals revision event with a sample of 507 medical students. 81.7% of participants reported that their use of independent VLE opportunities had increased since the onset of the COVID-19 pandemic, while 13.8% reported it had remained the same and 4.1% reported it had decreased. 77.3% of participants agreed that the VLE increased their exposure to the specialty, which is often underrepresented in medical school curricula.²

Furthermore, 68.4% of participants preferred attending virtual lectures to the traditional face-to-face variant and 37.7% preferred virtual tutorials. This is further evidence to the authors' hypothesis that the accessibility of such lectures and the greater engagement in virtual small group tutorials improve the student experience. Going forward, institutions may look to permanently adopt virtual teaching for certain activities such as lectures and tutorials given they are quite well received by students and the aforementioned logistical advantages.

As noted by the authors, there are certain gaps in clinical and surgical teaching that cannot be bridged by virtual alternatives. This is a sentiment clearly echoed by students as just under 10% of participants would prefer to attend activities such as clinical skills teaching (9.7%) and clinics (9.5%) virtually, demonstrating some limitations of online education noted by the authors. 37.06% of final years reported that their T&O placement had been affected by the COVID-19 pandemic, with an associated reduction in clinical exposure.

A subgroup analysis of UK final year students (n = 173), found that students who had not experienced a T&O placements felt less equipped to undertake their first post-graduate job involving T&O than those who had. 48.8% disagreed that they could safely perform their first postgraduate T&O job compared to 21.1% of those who had experienced a placement. This adds to the argument that although some forms of virtual teaching are well accepted by students, clinical teaching still remains essential for the development of competent future doctors.

Medical education has undergone a pole shift in recent times. In order to build students to a level that they can function as safe doctors during a pandemic, they must gain hands-on experience, as well as theoretical knowledge. To aid this going forward, we propose a hybrid model of clinical exposure and online resources, maintaining a reduced risk of students acting as a vector and building theoretical knowledge, whilst to further ensuring that students are safe junior doctors in the very near future.

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