How can undergraduate ophthalmology teaching be improved?

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Dear editor,

We read with high interest the article by Shah,¹ which describes strategies for curriculum changes to increase exposure to smaller specialties, including dermatology, psychiatry, and radiology. To this list of specialties, we would also like to add ophthalmology. In a survey of UK medical schools, Baylis et al² found that undergraduate ophthalmology attachments were not compulsory and sometimes only limited to 7 days. Moreover, medical schools were gradually reducing the amount of exposure to ophthalmology within the curriculum.

In the article, the author points out the shortfall of psychiatrists and interventional radiologists in the UK and USA due to the lack of exposure in medical school. In contrast, ophthalmology remains extremely competitive with relatively few training posts available. However, in the UK, for instance, lack of undergraduate ophthalmology education has resulted in many new medical graduates lacking basic ophthalmic skills which are required for foundation years, and this particularly affects those who will work in the accident and emergency department. A recent 2008 survey in England by Sim et al³ showed that 63.9% of senior house officers have little or no confidence in dealing with eye emergencies, and this proportion is unchanged from a previous similar national survey by Tan et al.⁴ This can potentially lead junior doctors missing important ocular signs that can subsequently have devastating sight-threatening or life-threatening implications.

The author also highlights different strategies adopted by the Royal College of Psychiatrists to address the shortage of psychiatrists, including setting up medical school societies, career fairs, summer schools, intercalated Bachelor of Science programs, and student elective modules to enhance students’ learning. While we believe that similar measures can be employed to improve ophthalmology teaching and learning outcomes, we would also like to highlight the emergence of e-learning and its positive impact on the delivery of medical education. In a survey of undergraduate medical students, Gormley et al⁵ found that the use of e-learning was rated just as highly as other traditional methods of teaching and recommended its use in a blended approach.

Succar et al⁶ reported the success of an interactive web-based teaching module, the Virtual Ophthalmology Clinic, based on statistically significant improvement in academic performance and highly positive student feedback. Computer-assisted learning programs provide independence and flexibility, such that students are able to learn in their own time in off-site locations, while receiving online feedback from...
tutors. Furthermore, virtual simulation offers exposure to a wide variety of conditions.

Malik et al demonstrated the effectiveness of cataract surgery teaching videos to medical students by using the online questionnaires before and after viewing the videos as an assessment method. They noted a statistically significant mean percentage improvement in scores post-video. Additionally, the authors recommended the use of e-learning as an adjunct to support traditional teaching methods.

In conclusion, we would like to highlight the importance of an ophthalmology placement within the undergraduate medical syllabus. However, we also realize that this is not a straightforward issue due to the emphasis on core specialties and workforce requirements. Hence, we sought to draw attention to other methods such as the use of e-learning to improve ophthalmology teaching within an already crowded curriculum.

Disclosure
The authors declare no conflicts of interest in this work.

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