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EDITORIAL

Ophthalmic education in universities

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Knowledge of and ability to clinically assess the visual system is important for every medical graduate. Universities train individuals to be competent Foundation Year (FY) doctors. The General Medical Council lists direct ophthalmoscopy as a skill expected of medical graduates, in the Practical Skills and Procedures section of Outcomes for Graduates. FY doctors will encounter ward patients with visual complaints. Of course, undergraduate training also lays the basis for an entire career of practice, and patients with visual and eye problems will present to most medics, in General Practice (GP), Emergency Departments (ED) and in a range of out-patient settings including endocrinology and neurosurgery. For those who practice medicine in low income settings, addressing visual problems can have a massive impact both for individuals and populations.

Medical school curriculums vary widely in the provision of exposure to ophthalmology, and Dr Jawaheer describes his experience as being inferior to that in his optometry course [1]. He suggests possible solutions, but ophthalmologists can do more in response to Dr Jawaheer's call to action.

Having an ophthalmologist on relevant medical school committees may increase the chances of ophthalmology having a greater prominence in the curriculum and exams, and while there is no evidence for this, it is plausible and such involvement is to be encouraged. Short of a formal role, we can all make our presence felt by helping where help is often needed: volunteering as examiners for OSCEs, writing OSCE stations or multiple choice questions or contributing teaching material. Getting involved in the fabric of medical schools, including having the informal conversations that will be had, helps to maintain the profile of ophthalmology in the minds of medical schools' decision makers, as well as being an enjoyable diversion from clinical commitments.

Ophthalmology can be inserted into other parts of the curriculum. Red eyes could be taught as part of GP and ED attachments, as well as in ophthalmology. This would provide a spiral curricular structure for ophthalmology, reinforcing learning, show the relevance of ophthalmology outside the eye clinic, and offer different emphases.

In Queen's University of Belfast, all final year students do the 'Simulated Eye Clinic' as part of their 'Human Factors Week'. This has been shown to boost self reported confidence [2], though the content evolves annually. Students in pairs rotate round five stations, in which they engage in scenarios involving challenges in ophthalmic contexts, including breaking bad news (for example, about the legal limits for driving after the measuring simulated poor visual acuity of a simulated patient who is keen to drive), making mock acute referrals by phone to each other, and spotting potential errors (for example of a mismatch between visual field results obtained by confrontation testing and those presented by 'the patient' as a print out, which belong to a different patient). Students take away generic learning while applying ophthalmic knowledge and skills.

Dr. Jawaheer mentions technology. Virtual reality will undoubtedly play a role [3], but like all technology is merely a tool. It is easy to be swept away with the excitement of the new, but novel tools must be part of a planned pedagogical strategy and for specific learning outcomes, rather than for their own sake. The educational value of new tools should also be evaluated. Education 'delivered in ignorance of available research may miss important opportunities to benefit learners' [4]. It has been suggested that decisions about teaching are often made on the basis of 'prejudices, hunches, opinions and guesses: PHOG' [5]. The lack of an evidence base to experts' opinions does not make them incorrect. At the very least, experts' guidance generates hypotheses and discussion, and at best experts' experience and insights are to be valued. However, ophthalmology has a vigorous culture of research, and if the specialty can lead the way in scholarly investigation of education, the quality of ophthalmic learning can be improved by identifying what works best, thus ultimately benefitting patients, and ophthalmology can contribute to the wider field of medical education research, perhaps with new methods or transferrable insights.

Such activities and enthusiasm will largely however be individual dependent: we all have different roles, interests and demands. One challenge is to ensure all UK medical graduates get approximately the same learning opportunities. The trend is towards their all being assessed collectively, as the Applied Knowledge Test of the Medical Licensing Assessment approaches in 2024/25 (https://www.gmc-uk.org/education/medical-licensing-assessment accessed January 2023). The RCOphth has addressed potential inequity of learning opportunities in several ways. The RCOphth Curriculum for Undergraduates (https://www.rcophth.ac.uk/our-work/ophthalmology-careers/medical-students-and-foundation-doctors/ accessed January 2023) provides an guide on the breadth and depth of ophthalmology that should be acquired by medical students and FY doctors, similar to the GMC's MLA content map (https://www.gmc-uk.org/-/media/documents/mla-content-map-_pdf-85707770.pdf accessed January 2023). The RCOphth's Student Ophthalmology Review Day has delivered a standardised curriculum to attendees, and the College's Student Society Meeting has brought together Ophthalmology Societies from UK universities to make connections, compare experiences and share resources. More impactful than all this will be INSPIRE, the College's new online learning platform, which will give access to us all, including Associate Members like medical students, to high quality materials, at both a fundamental and more complex levels, which will act as an adjunct to the learning available at medical schools, and may even be used by medical schools as teaching material. INSPIRE is potentially transformative at many levels of experience, and the opportunity is there for us all to contribute, thereby contributing to the development of others.

Medical students' interest in our specialty should not be taken for granted, and that every medical graduate needs ophthalmic

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abilities should not be overlooked. We are lucky as a profession to have a continuous stream of able and enthusiastic learners, and we can all help to nurture them to become safe and effective practitioners for their future ophthalmic patients.

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AUTHOR CONTRIBUTIONS

MW conceived of and wrote the piece.

COMPETING INTERESTS

The author has a financial interest in the app discussed in ref. [3].

ADDITIONAL INFORMATION

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