Improving medical students' proficiency in ophthalmoscopy

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Dear editor

We read with great interest the article by Gilmour and McKivigan, which assessed medical students' ability to accurately match fundus pictures with real patients using a hand-held ophthalmoscope.¹ The results demonstrated that only 30% of students were able to do so accurately, signifying a gap in ophthalmoscopy training.¹ Ophthalmoscopy is an essential skill that needs to be grasped sufficiently during medical school. It is an essential method used for screening and early detection of a number of pathological conditions with the aim of preventing vision loss. Being medical students, we concur with the observation made by Gilmour and McKivigan that almost universally students lack confidence with this physical examination. Ophthalmic medical education has gradually decreased;² therefore, the authors are right to suggest a novel approach that can be used for training and assessment purposes to improve and revitalize learning in this area.

Despite our appreciation for this article, we feel that initially efforts should be made to remove current barriers that prevent medical students from seizing invaluable opportunities to practice ophthalmoscopy in primary or secondary care on a daily basis. Quick and easy accessibility to an ophthalmoscope can be a problem, making students less likely to carry out ophthalmoscopy as part of a practice examination. Interestingly, Lippa et al also acknowledged the omission of ophthalmoscopy during examinations and attributed limited access to ophthalmoscopes and discomfort with skill sets as possible explanations.³ Schulz and Hodgkins illustrated that medical students are unlikely to purchase their own ophthalmoscopes.⁴ We believe that providing medical students with ophthalmoscopes at the start of their clinical years will boost the number of times students practice this examination, thereby improving their competency. However, we acknowledge that this may be associated with a high cost. Returning the ophthalmoscope at the end of placements or sharing one between a small number of students could be a solution and would help to reduce the cost. It would be useful in future studies to ascertain whether granting students easier access to ophthalmoscopes affects their proficiency in using them.

In unison with this, Gilmour and McKivigan analyzed a number of variables that may influence students' ability to choose the correct fundus photo.¹ An interesting addition to these variables would be an approximation of the number of times the

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individual students had practiced ophthalmoscopy prior to taking part in this study. We predict that this would impact results seen in this article.

In conclusion, we recommend implementation of this novel teaching and assessment technique. Due to the fast pace of hospitals and other barriers that may stop students from practicing ophthalmoscopy in medical settings, we feel that the unique technique suggested by Gilmour and McKivigan would provide a perfect “middle-ground” between learning from PowerPoint lectures to practicing ophthalmoscopy on patients in a medical setting. Easier access to ophthalmoscopes and encouragement regarding their use would improve students’ proficiency, although this is something that should be tested in the future.

Disclosure

The authors report no conflicts of interest in this communication.

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