

Blind spots in medical students with color vision deficiency

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Dear editor

The cross-sectional descriptive study on color vision deficiency (CVD) among biomedical students carried out by Dohvoma et al¹ is an interesting read. CVD is not tested in medical students in the UK, though it is routinely tested among those in India upon admission,² as it is believed that misinterpretation of colored signs can lead to misdiagnosis. In the aforementioned study, 1.3% of the biomedical students were positively tested to be “color blind” through Ishihara’s plate test and Roth’s 28 hue test.¹ The Farnsworth–Munsell 100 hue test also exists to diagnose CVD, though this is more time-consuming and expensive to carry out than Roth’s 28 hue test.³

The authors correctly highlight the importance of detection of medical signs based on color such as jaundice, rashes, and interpretation of laboratory photographs. CVD affects 1 in 12 men and 1 in 200 women;⁴ given the low prevalence of this, particularly among females, one can argue that it would be a waste of resources to routinely test medical students on entry or perhaps limiting the test to males, whom CVD affects more. Furthermore, literature shows that the prevalence of CVD among male medical students and the general population is similar.⁵ Therefore, if medical students are tested for CVD, then testing could be expanded to other professions that also rely heavily on color accuracy, such as pilots and electricians.

One could even argue that testing medical students for CVD is a waste of resources, as there is little published literature to provide evidence that CVD affects the performance of doctors.⁵ Additionally, there are many leads in the diagnosis⁵ pathway of a patient that do not necessarily always rely on color detection, for example, history taking, and practitioners with CVD could ask for the second opinion of colleagues on detection of conditions with distinctive color such as pallor and erythema.

Disclosure

The author reports no conflicts of interest in this communication.

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