

Changing Student Perception of an Online Integrated Structured Clinical Examination During the COVID-19 Pandemic [Letter]

George Hazell

Department of Medicine, Imperial
College London, London, UK

Dear editor

I read with interest the paper by Ganesanathan et al investigating medical student perceptions of online integrated structured clinical examinations (ISCE), particularly as this is highly pertinent to my medical education throughout COVID restrictions.¹ The authors have produced a relevant and timely analysis of education during the challenging late years of medical school, and have contributed to an emerging picture of the attitude to mixed modality teaching and assessment.

The online nature of an ISCE exam to combat the physical constraints of large group gatherings imposed by COVID-19 lockdown measures presents a novel challenge for conducting clinical exams virtually. Anxiety regarding exams, regardless of pandemic restrictions, has been described by Young et al.² The findings of Young et al corroborate the fact that a mock exam alleviates exam stress amongst students. However, the link between a mock exam, regardless of the environment it is conducted in, and the reduction in stress and anxiety exhibited by students remains. Whether Ganesanathan et al's findings are exclusively relevant to online examinations, unfamiliarity with exam formats, or restricted to generalised exam anxiety for high dependency exams requires further investigation.

Supporting findings from Elsalem et al have also identified technical stressors (exam platform and internet connectivity) as the leading theme of exam stress for students conducting remote online examinations, corroborating Ganesanathan et al's.³ Elsalem et al's discussion recommends including mock examinations to combat the student perception of online medical science examinations, which Ganesanathan et al have substantiated as improving student attitudes.

Interestingly, I feel Ganesanathan et al identified a pertinent point in their discussion, considering whether virtual exams assess the same core skills as in-person, particularly given the significance of non-verbal communication in medicine. Oliven et al have investigated the relationship between virtual patient (VP) and traditional clinical oral examinations.⁴ The authors have developed a software package able to mimic the history and physical exam aspect of clinical examinations. Their work revealed no correlation between scores in computerised VP oral examinations, and bedside oral exam attainment in a cohort of 586 individuals. Oliven et al's work demonstrates that while virtual and simulated examinations can assess a student's competency, this may not directly assess the same facets of

Correspondence: George Hazell
Imperial College School of Medicine,
Imperial College London, South
Kensington Campus, Sir Alexander
Fleming Building, London, UK
Email george.hazell16@imperial.ac.uk

a medical student's professional competency as physical exams. While the nature of the interaction between student and "patient" differs, their findings lend credence to the question as to whether the online exam itself presents a parallel assessment to physical examinations.

The authors noted an astute point that online ISCE exams may form part of a curriculum assessment moving forward, but may not represent a sole method of assessment. Recent findings from Dutta et al identified that e-OPSEs (objective structured clinical examinations) were non-inferior to in-person assessments, supporting Ganesanathan et al's position.⁵

While online exams may have a place in the future of medical education, and the agreeableness of students to it as demonstrated by Ganesanathan et al is reassuring, exams should be tailored to assessing a student's competency for the day-to-day work, and this includes assessing clinical skills.

Abbreviations

AUC, area under the curve; LS, least squares; NE, not estimable.

Disclosure

The author reports no conflicts of interest in this communication.

References

1. Ganesanathan S, Li C, Donmir A, et al. Changing student perception of an online integrated structured clinical examination during the COVID-19 pandemic. *Adv Med Educ Pract.* 2021;12:887–894. doi:10.2147/AMEP.S325364
2. Young I, Montgomery K, Kearns P, Hayward S, Mellanby E. The benefits of a peer-assisted mock OSCE. *Clin Teach.* 2014;11(3):214–218. doi:10.1111/tct.12112
3. Elsalem L, Al-Azzam N, Jum'ah AA, Obeidat N, Sindiani AM, Kheirallah KA. Stress and behavioral changes with remote E-exams during the Covid-19 pandemic: a cross-sectional study among undergraduates of medical sciences. *Ann Med Surg.* 2020;60:271–279. doi:10.1016/j.amsu.2020.10.058
4. Oliven A, Nave R, Baruch A. Long experience with a web-based, interactive, conversational virtual patient case simulation for medical students' evaluation: comparison with oral examination. *Med Educ Online.* 2021;26(1):1946896. doi:10.1080/10872981.2021.1946896
5. Dutta AK, Goswami K, Murugayan SB, et al. Evaluation of e-OSPE as compared to traditional OSPE: a pilot study. *Biochem Mol Biol Educ.* 2021;49(3):457–463. doi:10.1002/bmb.21500

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