An Alternative Certification Examination in Surgery 'ACE'
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Abstract

**Background:** Medical graduates are required to be competent in many domains of professional practice when joining the healthcare workforce. Current undergraduate examination methods robustly assess up to five of these eight required skills. This study sought to evaluate an alternative certification examination "ACE" in assessing all eight of the required domains in surgical cases. **Methods:** 143 final year medical students were invited to participate in an "ACE" in February 2013. 137 students agreed to participate - 95.8\% of the class. The "ACE" format consisted of 4 sequential patient encounters observed by two independent examiners. It assessed all eight required domains of professional practice. Examiners and students evaluated this exam format using a Likert scale and free text comments. **Results:** The "ACE" assessed all eight domains. The inclusion of a patient safety measure of avoidance of an egregious error in the pass criteria resulted in 27 (18.9\%) students failing to meet the pass criteria. The correlation of grades between independent examiners in the "ACE" was strong at 0.907 (CI 0.766, 1) Cronbachs Alpha. The "ACE" format was reported as an acceptable examination methodology by Examiners for formative or summative assessment of surgical cases at the end of a primary medical degree. **Conclusion:** The "ACE" exam format is standardised, integrative and has excellent inter-rater reliability. Inclusion of a patient safety measure as pass criteria appears to increase specificity. The "ACE" shows potential as an alternative examination to the traditional long case and OSCE in assessing all eight domains of professional practice.