

Understanding the Significance of High Stakes and Low Stakes Assessments in Medical Undergraduate training

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Abstract

Assessment is a crucial part of the medical curriculum and is present throughout the duration of undergraduate training. Assessments should be planned in such a way that something should always be at stake (means the consequence of the assessment). Conducting assessments without keeping anything at stake makes the students adopt a casual approach toward examination, while using the results of the assessment for promotion to the next professional year accounts for an immense amount of stress and anxiety. To conclude, both high stakes and low stakes assessments have pros and cons, and the ideal approach will be to employ them as a continuum and use a mix of them. This will significantly aid in improving the learning outcomes of the students and in the attainment of the desired competencies.

Keywords: Assessments, high stake assessments, low stake assessments, medical education

INTRODUCTION

Assessment is a crucial part of the medical curriculum and is present throughout the duration of undergraduate training. The proposed assessments start right from the time of enrollment in the course and are also being advocated for monitoring the gain in knowledge, tracking the learning progression, monitoring attainment of competencies, for promotion to the next professional year of training, etc.^[1] Assessments play a significant role in also ascertainment of acquisition of problem-solving, clinical reasoning, critical thinking, decision-making, and other non-cognitive attributes (such as teamwork, professionalism, leadership skills, etc.) and thus should be systematically planned for deriving maximum benefits.^[1,2]

FORMATIVE AND SUMMATIVE ASSESSMENTS

In general, assessments in medical education have been classified as formative and summative assessments. Formative assessments refer to assessment for learning, which is planned and conducted throughout the duration of the course to identify gaps in knowledge and thereby

improve the learning accordingly.^[3] There are two essential considerations for an assessment to be formative, namely, feedback should be given to the students and the students should have a chance to improve their performance.^[3] Summative assessments refer to the assessment of learning and are done at the end of the course to collect evidence about the knowledge and skills acquired by the students. In summative assessments, decisions are taken with reference to the promotion or retention of students in the same year.^[1-3]

STAKES IN ASSESSMENT

Assessments should be planned in such a way that something should always be at stake (means the consequence of the

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assessment).^[4] Stakes in assessment have been recognized as an important aspect of the approach of programmatic assessment, which is a crucial pillar in the implementation of competency-based medical education.^[5] Conducting assessments without keeping anything at stake makes the students adopt a casual approach toward examination, while using the results of the assessment for promotion to the next professional year accounts for an immense amount of stress and anxiety.^[4,5] However, optimizing the stakes of individual formative assessment is expected to improve the learning, provided that there are a series of assessments, altogether contributing to the decision taken in summative assessment.^[4,5]

HIGH STAKES ASSESSMENTS

This kind of assessments generally involves a significant amount of risk or implications to the students, wherein they can get benefited or deprived to a remarkable extent. It would not be wrong to say that the results of high stakes assessment during summative examinations can prove to be quite complex and controversial.^[4] These assessments provide students an opportunity to demonstrate their strengths, evidence of acquired competencies, and inference to the program managers about the attainment of course objectives. The performance in these assessments is used for deciding punishments, recognition, or advancement to the next professional phase of training.^[4,5]

In continuation, the institution eventually recommends the regulatory body and also the society about whether an individual medical student is competent as per the set norms and is ready to provide health care to the community.^[6] As it is a major decision, it is recommended that a panel of teachers should take this decision and not the head of the department alone. It is also important to note that performance in a single high stakes assessment should not become the only criterion to decide about the future of the student, and we should always consider other supporting information (viz., performance in other formative assessments, contribution/participation in academic activities, attendance, professional behaviors, etc.) to augment the validity of our decision.^[5-7] This will essentially require monitoring the performance of students throughout the professional year and generating all the supporting evidence.

It is important to note that as there are not many assessment points (high-stakes assessment is summative and happens at the end of the training period), there are no opportunities for the students to receive feedback and improve accordingly.^[5,6] As all students are subjected to high stakes assessments, it is a resource-intensive process and also a stressful event for the students.^[5] Further, the decisions once taken are not reversible under normal circumstances, and thus all care should be taken before arriving at one. We must understand that the performance of students in a high stakes assessment can also be used to

make the teacher, department, or institute accountable for the quality of education delivered to students.^[4,5]

The high stakes assessment (university examinations) can be carried out in the form of theory (multiple-choice questions, essay, short answer questions, very short answer questions), practical, and clinical assessments.^[5,6] The teachers can use different tools based on the task assigned to the students, such as the ability to define or recall facts (writing assignments), synthesis of concepts in the course (simulations, portfolios, etc.), application of knowledge (case studies, simulations, writing assignments, etc.), or creation of new knowledge (through dissertation, presentation, research project review, etc.).^[4-8]

LOW STAKES ASSESSMENT

The low stakes assessment refers to the formative assessments that have to be organized throughout the training period a multiple times.^[9] As it is conducted a number of times, each individual assessment has a limited impact on the performance of students. However, the number of points for receiving feedback becomes more, and thus students have a better chance to learn from their mistakes and improve themselves, which is not the case with high stakes assessment.^[10] Further, the probability of punishment also decreases and such assessments tend to be less stressful for the students. The aim of these assessments is to measure academic accomplishment, identify the learning areas that need support, and give feedback about the quality of teaching as well.^[4,9]

We must note that individual low stakes assessment does not have a significant impact on the final grades of the students or their learning outcomes. It is the responsibility of the teachers to create an enabling atmosphere for the students to take these assessments as one of the learning opportunities and improve accordingly.^[9,10] The workload on teachers is distributed throughout the course, and it is easy to reverse the decisions taken during low stakes assessment. In order to have a meaningful inference, the performance of students in different assessments can be aggregated and maintained.^[9] The tools for low stakes assessment can be quiz, discussion, use of interactive applications, problem-based learning, home assignments, writing assignments, etc.^[4,5]

At Shri Sathya Sai Medical College and Research Institute, a constituent unit of the Sri Balaji Vidyapeeth, Deemed-to-be-University, Puducherry, significant emphasis has been given towards formative assessments (low stakes assessment), so that students can be judged about their performance throughout the year. In-fact, the performance of students in these low stakes assessment are considered for their internal assessment, which in turn determine their eligibility for the summative assessment (high stakes assessment).

CONCLUSION

To conclude, both high stakes and low stakes assessments have pros and cons, and the ideal approach will be to employ them as a continuum and use a mix of them. This will significantly aid in improving the learning outcomes of the students and in the attainment of the desired competencies.

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Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Lockyer J, Carraccio C, Chan MK, Hart D, Smee S, Touchie C, *et al.*; ICBME Collaborators. Core principles of assessment in competency-based medical education. *Med Teach* 2017;39:609-16.
2. Simpkins AAM, Koch B, Spear-Ellinwood K, St John P. A developmental assessment of clinical reasoning in preclinical medical education. *Med Educ Online* 2019;24:1591257.
3. Rauf A, Shamim MS, Aly SM, Chundrigar T, Alam SN. Formative assessment in undergraduate medical education: Concept, implementation and hurdles. *J Pak Med Assoc* 2014;64:72-5.
4. Schut S, Driessen E, van Tartwijk J, van der Vleuten C, Heeneman S. Stakes in the eye of the beholder: An international study of learners' perceptions within programmatic assessment. *Med Educ* 2018;52:654-63.
5. Colbert-Getz JM, Fleishman C, Jung J, Shilkofski N. How do gender and anxiety affect students' self-assessment and actual performance on a high-stakes clinical skills examination? *Acad Med* 2013;88:44-8.
6. Lara S, Foster CW, Hawks M, Montgomery M. Remote assessment of clinical skills during COVID-19: A virtual, high-stakes assessment in anesthesia via simulation: Are we there yet? *Can J Anaesth* 2019;66:1431-6.
7. Munro AJ, Cumming K, Cleland J, Denison AR, Currie GP. Paper versus electronic feedback in high stakes assessment. *J R Coll Physicians Edinb* 2018;48:148-52.
8. Schrank Z. An assessment of student perceptions and responses to frequent low-stakes testing in introductory sociology classes. *Teach Sociol* 2016;44:118-27.
9. Schüttpeitz-Brauns K, Hecht M, Hardt K, Karay Y, Zupanec M, Kämmer JE. Institutional strategies related to test-taking behavior in low stakes assessment. *Adv Health Sci Educ Theory Pract* 2020;25:321-35.
10. Hatala R, Marr S, Cuncic C, Bacchus CM. Modification of an OSCE format to enhance patient continuity in a high-stakes assessment of clinical performance. *BMC Med Educ* 2011;11:23.