

# Assessment of Undergraduate Medical Students: a roadmap for modification?

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Few would disagree that assessment constitutes a very important part of the education process. On one hand assessment can pass or fail a student while on the other it is a formative tool whereby a student performance is likely to be improved through self-assessment. It is also true that a student's performance in a particular examination is not always because of poor understanding of the subject, it can be due to assessment not reflecting the curriculum learning objectives, faulty written items, selection of wrong assessment tools, or just examiners' bias.<sup>1</sup> Undergraduate medical students are overly burdened with a battery of examinations which in many instances fail to assess the competencies expected from a junior doctor. In this context traditional assessment methods have come under close scrutiny largely because of its emphasis on recall of information from textbooks and lecture notes, or irrelevant laboratory practical and bedside rituals under condition of stress and anxiety. It has widely been documented that undue stressful and superficial conditions are created that give misleading impressions of the true competencies of the students.<sup>2</sup> More important the link of assessment to learning is lacking. Assessment should be nothing less than a reflection of the learning objectives of the curriculum.<sup>3</sup> Competencies desired in graduates must be defined in terms of knowledge, attitudes and skills including clinical, technical, self-learning. Judgement on the achievement of these competencies is possible only when the individual is assessed continuously by several valid and reliable methods of examination. If appropriate guidelines and faculty development programmes are made available then there is increased likelihood that assessment pitfalls could be reduced. Hence it is vital that those concerned should be clear on what and how judgements are based as these have serious implications not only for the individual but for the society as well.

It is well researched that assessment method selected must be consistent with the defined objectives. Even today commonly used methods for assessment of knowledge are long subjective essays and unstructured oral interrogations. For clinical skills assessment traditional methods of long and short clinical cases have a strong hold and newer method such as Objective Structured Clinical Evaluation (OSCE) has yet to be introduced.<sup>3</sup> Unless assessors improve understanding of strengths and limitations of various methods, assessment will continue to have the reputation of being subjective, unreliable, and invalid. In response to the need, the JPMA starting from this issue and in the

forthcoming five issues is to publish Naqvi and Ahmed's articles that should provide hints to educators on developing assessment instruments on scientific lines. These guidelines are intended for readers who have had considerable training and experience, as well as those who had little or no training but follow the traditional pattern. Educators particularly responsible for examinations may find these series of articles a source of motivation for modifying assessment on sound education principles.

In Pakistan there seems to be some apprehensions among educators on the use of newer methods including Multiple Choice Questions (MCQs). In some quarters MCQs have fallen into disrepute largely due to unfamiliarity with the technique and high expectations from MCQs without considering the limitations. It is true that every method possesses its own advantages and disadvantages and each has a place depending on the context, relevance and resource. However some argue that MCQs test simple and isolated facts that promote rote memorization in students while others are uncomfortable with the increased role of computer technology that has virtually reduced the dominating role of senior teachers. After years of research MCQ has gained acceptance as a reliable method which can test higher intellectual domain. However one needs to understand that the quality of MCQ reflects the item writers understanding and experience rather than the fault of the technique. Many also argue that training alone can be frustrating for those educators who want to make a difference. More important is to work in a conducive environment where one can discuss with peers, give suggestions and make corrections if needed regardless if an individual is a content expert and have many years of teaching experience. Undoubtedly it is the environment of openness, trust and flexibility that allow diversity and growth of educators. It can be concluded that formula for reform is a combination of several factors including dynamic and visionary leadership, a facilitative environment and training in education. If this happens, not only the tools will improve but also the overall system of education will show sign of progress.

Given the present wave of medical educational reform sweeping worldwide, changes in assessment have comparatively been slow.<sup>4</sup> Changes emphasize on assessment that is congruent with the educational objectives and assess competencies that closely reflect the work of a junior doctor. Current literature

also favours the use of a variety of methodologies since no single method has all the virtues that one desires.<sup>5</sup> There seems to be agreement that knowledge assessment should constitute application of knowledge and clinical reasoning rather than memorization.<sup>6</sup> For clinical competence medical educators agree on continuous assessment of performance by valid, reliable and objective methods providing immediate feedback to students. Despite changes in medical curriculum, guidance on best practices in assessment continues to be insufficient. Therefore the need exists for continued research in developing instruments that can measure the desired competencies. As emphasized earlier many educators responsible for student assessment need to undertake the risk of creating an environment where one is willing to create a team, share responsibilities, learn from each other and accept suggestions for better assessment of students. For this purpose intensive and continued faculty development is essential not only on test development but overall on scientific principles of education. This may prove to be the likely roadmap for developing a core of medical educators with better understanding of the process of change required in medical education.

## References

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