

## A Review on Structured Oral Examination (SOE)

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Oral assessment refers to any assessment of student learning that is conducted by the spoken word. It is thought to be a particularly effective way of assessing certain kinds of abilities, like clinical decision making. The key factors to consider when setting assessment questions are validity (appropriateness, suitability), reliability (objectivity, consistency, accuracy and repeatability) and fairness (clarity of expectations, ways of preparing). Teachers are not yet develop to conduct such examination in a structured way. So, weakness of reliability on the oral examination still exists. Implementation of the SOE system will help to evaluate medical students properly and will help in development of medical education.

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### Introduction

Medical teaching and learning is a little bit more complex than any other educational program. Here, they not only need to learn but need to develop their skill and attitudes too. Hence, cannot depend on a single method of assessment. Thus, assessments are done through written, practical and oral examination in a comprehensive way.<sup>1</sup>

Joughin pointed out that oral examinations enable two qualities to be measured: student

command of the oral medium, and a student's command of content.<sup>2</sup> In Oral Examination, a set of stimulus questions are developed that address critical areas of knowledge, or sets of abilities related to a competency or set of competencies. Students are expected to respond verbally in their own words, which allow an assessment of the student's depth of comprehension, and capacity to apply knowledge and insights to different situations.<sup>2</sup>

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### What Is Oral Assessment?

Oral assessment refers to any assessment of student learning that is conducted by the spoken word.<sup>3</sup>

The oral or viva method of assessment was defined by Joughin as an "assessment in which a student's response to the assessment task is verbal, in the sense of being expressed or conveyed by speech instead of writing".<sup>2</sup> Here an examiner poses questions to the student in spoken form. The student has to answer the question in such a way as to demonstrate sufficient knowledge of the subject in order to pass the exam.

### Rationale For Oral Assessment

Oral assessment mirrors the oral form of communication that dominates professional practice.

It can test the limits of a candidate's knowledge and understanding. This applies to both exceptionally capable candidates and candidates whose weaknesses might otherwise not be clearly exposed.<sup>4</sup> It is thought to be a particularly effective way of assessing certain kinds of abilities, namely: clinical decision making or what has been termed "the cognitive processes which constitute professional thinking".<sup>5</sup> The oral exams format enables the instructors to test the students on all five cognitive domains of Bloom's taxonomy i.e. knowledge, comprehension, application, analysis, synthesis and evaluation.<sup>6</sup> In practice, they are used not as a substitute but as a complement to written exams.<sup>7</sup>

Orals give the examiner the unique opportunity to explore students' depth of knowledge as well as their ability to express it in a precise manner.<sup>8</sup> They are used for their flexibility and potential for testing higher cognitive skills.<sup>9</sup> Oral examinations are appealing because of their high face validity,

their flexibility and the possibility that they measure aspects of clinical competence that are perhaps not tapped in written examinations.<sup>10</sup> Orals provide the students an incentive to explore topics, give them a chance to interact one on one with examiners and get excited about learning.<sup>11</sup>

### Validity, Reliability and Fairness in Assessment

The key factors to consider when setting assessment questions are:

- Validity - appropriateness, suitability
- Reliability - objectivity, consistency, accuracy and repeatability.
- Fairness - clarity of expectations, ways of preparing

**Validity** concerns the capacity of assessment to prompt or allow a candidate to demonstrate the extent to which they possess the requisite knowledge, skills and values—it is about the relationship between an examination and the construct it aims to measure. It is also about the inferences we make based on this assessment. A basic test of validity is whether it measures less or more than the construct being tested. If it measures less, it is not sufficiently representative ('construct underrepresentation'); if it measures more, it is measuring factors that are not relevant to practice ('construct irrelevant variance').<sup>4</sup>

The term **reliability** means "repeatability" or "consistency". A measure is considered reliable if it would give us the same result over and over again providing what we are measuring is not changing. Assessment is unreliable if a candidate is likely to get a different result if different examiners were used, if a different sub-set of questions were asked, or if the assessment were to be conducted at a different time, or in a different context. Reliability is about consistency-between examiners, within the one examiner

but over time, and across variations within the one examination (where non-identical questions are asked of different candidates).<sup>4</sup> Reliability of the viva examination is often questioned but according to Sharmila Torke et al, reasonable reliability has been demonstrated with structured, standardized orals using hand-picked examiners.<sup>12</sup>

**Fairness** entails both the absence of bias within the test and assessment processes that give all candidates an equal opportunity to demonstrate their “standing on the construct the test is intended to measure”.<sup>13</sup>

### **Disadvantages of Oral Assessment**

Traditional oral examinations consist of a dialogue or discussion with the examiner who asks questions to which candidate must reply.<sup>8</sup>

Disadvantages include undue anxiety, hearing or speech difficulties, time required, lack of anonymity, bias, novelty, organizing recording, articulateness vs knowledge.

The use of oral examinations in high-stakes assessment systems has also been criticized for many years because of poor inter rater reliability.<sup>14</sup> The low reliability relates, in part, to the examiner's active participation in the examination, which can introduce bias. In the traditional oral examination, each candidate may receive a different assessment with regard to content areas addressed, the difficulty of the questions asked, the level of prompting or help provided, and the learning outcomes assessed; for example, knowledge of the basic sciences, patient investigation and management. These differences present difficulties not only in a norm-referenced system of assessment, where the intention is to rank the candidates, but also in a criterion-referenced system, where the intention is to assess whether or not the candidate has achieved a pre-determined standard. The

reasons for low reliability also have an adverse impact on validity because of the potential for variation in content matter addressed, and in the emphasis given to different content areas.<sup>4</sup> Oral examinations are usually employed in an attempt to assess the candidate's knowledge of a subject. Memon and his colleagues pointed out that viva marks correlated with personality scores.<sup>4</sup> Rowland-Morin *et al.*, showed that verbal style and dress of the candidates influence oral examination scores.<sup>15</sup>

Roberts *et al.* carried out a discourse analysis (a detailed study of language in use) of the oral component in the membership examination of the Royal College of General Practitioners (MRCGP), and pointed out that candidates from ethnic minorities and those trained abroad may experience particular hidden difficulties with oral examinations leading to discrimination. Furthermore, the discrimination may not be limited to ethnicity.<sup>16</sup> Esmail and May suggested that candidates from working class backgrounds and, in some instances, female candidates may also be discriminated against.<sup>17</sup>

The process involves many faculty members from respective departments. Hence there can be variations in the time allotted to each student, number of questions asked, and difficulty level of the questions. These can be resolved by structuring the oral examination to make it a better assessment tool.<sup>8</sup>

### **Traditional Versus SOE**

There are some challenges often faced in the traditional viva examinations. The atmosphere during traditional oral examination is often threatening and at times the dialogue takes the shape more of a confrontation than discussion. The subjectivity in the traditional viva can at times be frightening to the students. Questions asked vary from examiner to examiner and may not cover the syllabus. Most of the times questions are of recall type

rather than those which test the analytical & problem solving ability of the students. As there is no uniformity of questions and their difficulty level, the assessment of the students based on these questions may not be fair. Besides this, there can be some personal biases and carry over effect (performance of the previous student affecting score of the next) which are more likely to occur in a traditional oral examination.<sup>8</sup>

As studied by Holloway et al., there is an inverse relationship between anxiety and performance in the oral examinations.<sup>18</sup> A significant part of the error in oral performance ratings is due to the tendency for some evaluators to be soft and others to be strict in their assignment of ratings. Correcting for such errors would change the pass/fail decisions for about 6% of the examinees.<sup>119</sup> Marks awarded to candidates by different examiners indicates low reliability between ratings and agreement between examiners is often poor.<sup>20</sup>

All these problems may be overcome by replacing the traditional viva by structured oral examination (SOE). This can be done by pre deciding the syllabus to be covered, competencies to be measured and preparing a blueprint/checklist of questions to be asked in the viva. Although the implementation process is onerous, but once in place, it can become an efficient assessment tool.<sup>21</sup> In structured oral examination (SOE), as the Question, answers and scores are noted by the examiners for each candidate, a feedback can be given to them later, where they scored and where they did not do well.

A study in India showed by student's response that SOE is more reliable, coverage of syllabus is more, explored the subject more, minimized the luck factor and more comfortable than traditional oral examination. Anxiety or fear amongst the students is also

less in SOE. Uniformity of questions makes SOE a fair assessment tool.<sup>8</sup>

### Conclusion

Our observation regarding oral examination is, teachers are not yet develop to conduct such examination in a structured way. They primarily conduct oral examination on their traditional ways. So, weakness of reliability on the oral examination still exists. Implementation of the SOE system will help to evaluate medical students properly and will help in development of medical education.

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