



BLDE (Deemed to be University)
Shri B. M. Patil Medical College Hospital
and Research Centre Vijayapura
Medical Education Unit

**'Being a Competent
Medical Teacher'**

EDITOR

Dr Tejashwini Vallabha

ISBN: 978-81-949392-9-0

First Edition: 2020

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PRICE ₹ 399/-

**PUBLISHER
MAHI PUBLICATION**

-  Office No.1, Krishnasagar Society, Nr. Shivsagar sharda Mandir Road, Ahmedabad-380007
-  mahibookpublication@gmail.com
-  +(91) 798 422 6340
-  www.mahipublication.com

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14 IMPROVISING - LONG CASE EXAMINATION

Assessment in medical education is crucial to both student and the teacher. Assessment is incentive for learning. To promote learning assessment should be educational and formative.

Assessment methods that are used in undergraduate's medical education are broadly divided into Assessment of knowledge and its application like MCQs, essays and viva voce.

Assessment of clinical competence by long case, short case, viva voce

The practical /clinical examination is of key importance in assessment of clinical competence they play important role in the certification of candidate before they are allowed to practice medicine.

Why we want to evaluate?

- Assessment drives learning
- Observe competency for the job description.
- Correct the mistakes.
- Find out the adequacy of the curriculum

What do you want to evaluate?

The essential elements of clinical competence are

- Collection of clinical data by proper history taking and physical examination.
- Identification of patient problem
- Formulation of differential diagnosis
- Planning of investigations
- Management
- Demonstration of adequate communication on skills, attitude

towards patients

- Professionalism

Five required attributes to assessment process

- Reliability – measure of reproducibility or consistency or variation scores.
- Validity- does the evaluation tool really test what is intended to test?
- objectivity-will scores obtained by candidate be same if evaluated by two or more examiners?
- Acceptability- The degree to which assessment process is acceptable
- Educational impact- The degree to which assessment can assist student to improve his or her performance.

The traditional practical examination pattern consisting of one long case, two short cases and viva voce has many draw backs where large number of students are examined in short period of time.

This method of exams lack validity, reliability, objectivity if not conducted properly in organised manner keeping in mind the learning objectives.

Long case examination

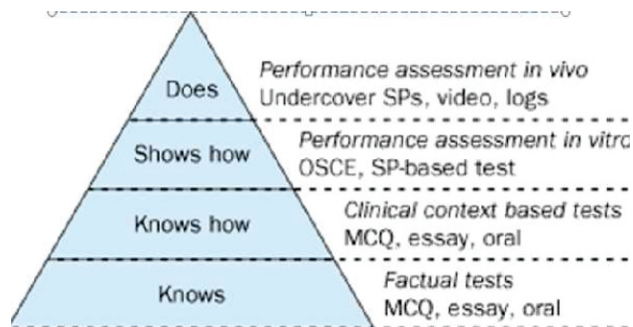
There has been justified criticism of long case in which different examiner examines different candidate on different patient. This has been rightly referred to as 'Luck of draw'

Drawbacks of long case exam,

Long case examination exist on "luck of draw"

- Communication skill is not observed
- Process of achieving result is not observed
- Product is assessed
- Discussion frequently on theory
- Approach and expectation vary with individual examiner
- Thus it lacks reliability, validity and objectivity

Miller's Pyramid of Competence



- The assessment of clinical skills/competence/performance.
- To improve the validity and reliability of assessment of many aspect of clinical competence new assessment tools are discovered.
- 1979: Harden and Gleeson developed the OSCE
- 1997: Gleeson developed the OSLER
- OSCE: Assessment of predetermined clinical components.

Here examination is organized to all students on identical content by same examiner using predetermined guidelines followed by feedback from student and teacher.

OSCE is meant to test shows how level of Miller's pyramid

Advantages:

More valid, reliable and maintain objectivity Wide ranges of skills are tested.

Disadvantages

Student knowledge and skills are tested in compartments and he is not tested in his ability to look at the patient as whole

OSLER- Objective Structured Long Examination Record.

Ten item analytical record form.

- 4 items for history taking, 3 items on physical examination, 1 each for formulation of investigations, management and clinical acumen in a logical sequence.

All candidates are assessed on the same ten items.

Time is 20-30 minutes for the examination.

Items are representatives: whole process.

OSLER's components:

History taking

- Clarity of presentation, communication process, systematic approach, establishment of case facts.

Physical examination

- Systematic approach, examination technique, establishment of correct physical findings.

Assessment of clinical acumen

- Ability to identify and solve problems

Standardizing the long case based on the difficulty of the case:

Standard case

- Single problem

Difficult case

- Up to three problem

Very difficult case.

- More than three problem

Awarding marks in the OSLER:

P+ : Very good/excellent. (60-80%)

P : Pass/ bare pass. (50-55%)

P- : Below pass

- Each items has to be graded followed by overall grade of the complete performance

NAME _____	EXAMINATION NO. _____																											
<p>Examiners are required to GRADE each of the items below and assign an overall GRADE and MARK concerning the candidate PRIOR to discussion with their co-examiner as follows:</p>																												
<p style="text-align: center;">GRADES</p> <p>P+ = VERY GOOD/EXCELLENT P = PASS/BORDERLINE PASS P- = BELOW PASS</p>	<p style="text-align: center;">MARKS</p> <p>(60-80+) (50-55) (35-45)</p>	<p style="text-align: center;">EXAMINER: </p> <p style="text-align: center;">CO-EXAMINER: </p>																										
<p>PRESENTATION OF HISTORY</p>																												
<p>PACE/CLARITY →</p> <p>COMMUNICATION PROCESS: <small>(History e.g. CVS, investigation e.g. endoscopy, management e.g. patient education)</small> →</p> <p>SYSTEMATIC PRESENTATION →</p> <p>CORRECT FACTS ESTABLISHED →</p>	<table border="1" style="width: 100%; height: 100%;"> <tr><th style="text-align: center;">GRADE</th></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> </table>	GRADE					<table border="1" style="width: 100%; height: 100%;"> <tr><th style="text-align: center;">AGREED GRADE</th></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> </table>	AGREED GRADE																				
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<p>PHYSICAL EXAMINATION</p>																												
<p>SYSTEMATIC →</p> <p>TECHNIQUE <small>(Including attitude to patient)</small> →</p> <p>CORRECT FINDINGS ESTABLISHED →</p> <p>APPROPRIATE INVESTIGATIONS <small>IN A LOGICAL SEQUENCE (Communication Process option)</small> →</p> <p>APPROPRIATE MANAGEMENT <small>(Communication Process option)</small> →</p> <p>CLINICAL ACUMEN <small>(Problem identification/Problem solving Ability)</small> →</p>	<table border="1" style="width: 100%; height: 100%;"> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> </table>						<table border="1" style="width: 100%; height: 100%;"> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td></tr> </table>																					
<p>ADDITIONAL COMMENTS:-</p>																												
<p>Please Tick (✓) For CASE DIFFICULTY</p>																												
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The pass mark is 50. Marks should be given in 5s (e.g. 80, 75, 70, 65, 60 etc) in accordance with the following guidelines. Intermediate marks, e.g. 53, 67 should **not** be used.

EXTENDED CRITERION REFERENCED GRADING SCHEME	EXTENDED MARKING SCHEME
P+	<p>80 Outstandingly clear and factually correct presentation of the patient's history, demonstration of physical signs and organisation of the case management. Clearly a candidate displaying outstanding communication skills and clinical acumen. First class honours.</p> <p>75 Excellent overall case presentation, communication skills, examination technique and demonstration of the correct facts and physical signs of the case. The candidate may even display outstanding attributes in some but not all measurable criteria. First class honours.</p> <p>70 Excellent in most respects of overall case presentation, communication skills, examination technique and demonstration of the correct facts and physical signs of the case. Also excellent communication and demonstration of</p>

3. Mini –Clinical Evaluation Exercise (m CEX) ¹¹

In this method, a faculty member watches a trainee – patient encounter in any health care setting.

The duration of each encounter shall be 15 minutes.

The trainee is expected to conduct a focused history and or physical examination during a allotted time.

Trainee provides assessor a diagnosis and treatment plan.

The performance is scored using a structured form, and the educational feed-back is provided.

Such 6 encounters are undertaken during a year.

For each encounter a different assessor is nominated. Each encounter will have different clinical problem

It has higher fidelity, permit evaluation based on a much broader set of clinical setting and patient problems, is less expensive and is administered on site.

Each domain is scored from 1-9, where:

1–3 = Unsatisfactory

4–6 = Satisfactory

7–9 = Above average

There is also the option of scoring “not observed” when a particular skill has not been assessed or observed.

4. DOPS – Direct Observation of Procedural Skills

In this method, the assessor observes the trainee while he or she is performing a procedure.

The assessor rates the performance and then provides feed-back

Trainee has to undertake such 6 encounters in a year. For each encounter a different assessor is nominated. For each encounter a different procedure is performed.

Direct Observation of Procedural Skills format

Please complete the question using a cross (x). Please use black ink and CAPITAL LETTERS

Trainee's		
Trainee's		
GMC number		GMC NUMBER MUST BE COMPLETED

Observation		
Code number		

Observed by		
GMC number		GMC NUMBER MUST BE COMPLETED
Date		
Signature of supervising		

Assessment:

	Practice was satisfactory	
	Practice was unsatisfactory	
<p>If the performance was judged to be unsatisfactory, you must tick the boxes on the reverse of this form to indicate which areas of performance you judged to be unsatisfactory. Areas of excellent practice can also be indicated on the reverse.</p>		
<p>Example of good practice were:</p>		
<p>Areas of practice requiring improvement were:</p>		
<p>Further learning and experience should focus on:</p>		

5. OSATS – Objective Structured Assessment of Technical Skills.

It assess specific procedural skills like appendicectomy, cataract surgery etc.

It assess procedure skills, handling of instrumentation and documentation.

It has strong validity but less reliability.

Conclusion

OSCE and OSLEP are the methods of choice that are used to assess clinical skills in a stipulated time that is during so called final Exams involving large number of students in a given time.

MCEX and DOPS are the methods which assess student's clinical acumen over a period of time.

All these tools are excellent and fulfil criteria of a near ideal tool for long case assessment.

The perfect method for long case clinical assessment has yet to be established.

Any method will always be a compromise between objectivity, validity and reliability on one hand and practicality on the other.

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