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# Students' Perception Regarding the Conventional First MBBS Practical Examination

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## ABSTRACT

**Introduction:** The assessment of MBBS phase I under Rajiv Gandhi University of Health Sciences(RGUHS), Karnataka, India has two components - theory and practical. The theory assessment is uniform among all students and the majority of the questions are in the structured format to ensure objectivity. But this is not so in the case of the practical examination.

**Objectives:** To evaluate the various factors influencing the MBBS phase I practical examination from the student perspective.

**Methods:** The procedure and the intent of the feedback were explained to the students. The feedback of students regarding the University practical assessment was obtained by using a structured questionnaire. The questionnaire consisted of nineteen questions based on five points Likert's scale and two open-ended questions. The respondents' agreements/disagreements were noted. The feedback was taken from 478 undergraduate medical & dental students after the RGUHS practical examinations. Each question was analysed on Likert's scale and the percentages were tabulated.

**Results:** The analysis of the questionnaire indicated that 82% & 77% of students have agreed that the assessment is fair & uniform respectively. 38.5% have felt the practical assessment to be stressful while 41.3% felt it was not stressful. Around 63% to 69% of students felt luck, chance factors and examiner related factors influenced their scores.

**Conclusion:** The students have felt the traditional practical examination to be fair, uniform, with no bias to a certain extent, yet stressful with chance factors such as luck, communication skills and examiner related factors influencing their scores.

**Key Words:** Objective Structured Practical Examination, Viva voce, Competency, Assessment, Evaluation, Feedback

## INTRODUCTION

The assessment of MBBS phase I under Rajiv Gandhi University of Health Sciences(RGUHS), Karnataka, India has two components - theory and practical. The theory assessment is uniform among all students and the majority of the questions are in the structured format to ensure objectivity. But this is not so in the case of the practical examination. A good practical evaluation has to include the criteria of objectivity, uniformity, validity, reliability & practicability.<sup>1</sup>

The Conventional practical examination as per the Rajiv Gandhi University of Health Sciences(RGUHS), Karnataka, India consists of spotters, surface marking, discussion of gross specimens and histology slides. Even though the spotters are conducted for different batches on different days, the assessment level is more or less uniform among the batches. However, a small element of subjectivity may

be present. The surface marking can be made objective by using a proper checklist. The discussion of gross specimens and histology slides in the present scenario has a major subjective component. Hence, feedback was administered to the students to obtain their perceptions regarding the factors which influenced the practical examination. The feedback analysis obtained may throw light on the objectivity, validity and reliability of the practical examination. This study aims to evaluate the various factors influencing the MBBS phase I practical examination from the student perspective. This may serve as a crucial factor to enhance the standard of assessment in the educational program.<sup>2,3</sup>

## MATERIALS AND METHODS

The present study is a cross-sectional study, conducted for 3 years at M.S. Ramaiah Medical College, Bengaluru. The

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sample size was 120 first-year Medical and Dental undergraduate students per year who gave their consent to be a part of the study. The students who did not consent were excluded. The procedure and the intent of the feedback were explained to the students. The feedback of students regarding the University practical assessment was obtained by using a structured questionnaire. The questionnaire consisted of nineteen questions based on five points Likert's scale and two open-ended questions. The respondents' agreements/disagreements were noted. The feedback was taken from 478 undergraduate medical & dental students after the RGUHS practical examinations. Each question was analysed on Likert's scale and the percentages were tabulated.

### Statistical Analysis

The questionnaire was validated using methods like Face validation and Content validation. The data was tabulated in a Microsoft Excel datasheet, frequencies and percentages have been calculated using the SPSS software.

## RESULTS

### Analysis of the questionnaire

82% & 77% of students have agreed that the assessment is fair & uniform respectively. 38.5% have felt the practical assessment to be stressful while 41.3% felt it was not stressful, however, 19.5% of them were unsure of it. Around 63% to 69% of students felt luck, chance factors and humble nature influenced their scores. 60% to 63% have indicated the examiner related factors influenced their scores (Table 1). On average, 72.5% of students felt that the number, type, complexity of questions by different examiners could affect their scores. An average of 56.6% of students has indicated that there was no gender, nationality or regional bias influencing their scores. 76.8% and 53.1% reflected that communication skills and dressing skills had an impact on their practical assessment.

**Table 1: Analysis of feedback questionnaire on Likert's scale**

Sl. No	Questions	In percentage					
		5	4	3	2	1	0 -NA*
1.	The assessment is fair among all students.	32.8	49.2	11.3	5.2	1.0	0.4
2.	The assessment is uniform among all students.	29.9	47.1	14.4	7.7	0.4	0.4
3.	The pattern of practical assessment is stressful	12.3	26.2	19.5	35.4	5.9	0.8
4.	My luck has an impact on my scores.	27.4	34.9	17.6	14.2	5.2	0.6

5.	There are a number of chance factors in my assessment for discussion topics	24.7	41.4	20.3	10.0	2.5	1
6.	The chance factors influence my scores	23.2	41.0	21.3	10.7	2.7	1
7.	Communication skills influence my scores	27.4	49.4	13.4	7.7	1.3	0.8
8.	My formal dressing style has an influence on my assessment	16.5	36.6	26.6	15.7	4.2	0.4
9.	My humble nature has an influence on my assessment	20.3	44.4	27.6	5.9	1.5	0.4
10.	There is a difference in my scores when different examiners examine me for the same specimen.	21.3	42.5	24.3	9.4	1.9	0.6
11.	My scores are influenced by mood of examiners	22.8	37.9	27.4	9.4	1.9	0.6
12.	My performance is influenced by fear of examiners	22.2	40.6	19.2	14.9	2.5	0.6
13.	The number of questions asked by the same examiner; varies from student to student.	23	53.8	17.6	5.4	0.0	0.2
14.	The number of questions asked to the same student; varies from examiner to examiner.	25.7	55.9	14.2	3.3	0.6	0.2
15.	The type of questions asked about the same specimen varies from student to student.	18.2	47.9	22.4	10.0	0.6	0.8
16.	The type of questions asked about the same specimen varies from examiner to examiner.	22.2	54.0	18.2	4.0	0.6	1
17.	There is gender bias in the assessment of practical examination.	6.1	10.7	29.5	35.6	17.6	0.6
18.	There is bias in the assessment due to nationality status.	5.0	8.8	26.2	36.8	22.6	0.6
19.	There is bias in the assessment due to regional status.	6.3	11.3	24.9	34.3	22.8	0.4

\*NA – Not answered

### Analysis of open-ended questions

The common repetitive feedback response from the students were as tabulated below. The existing pattern of practical examination has been appreciated by the students in many ways despite its subjectivity. The good conduct of the examination, adequate time, uniform & fair assessment was acknowledged by some of the students.

### Chance factors and their role

The following were the possible chance factors (Table No 2) that the students felt had a role in the practical examination assessment thereby making the examination system more subjective than being objective.

**Table 2: Chance factors role in the practical examination**

Sl. No	Chance factor categories	Chance factors
1	Student related factors	Communication skills (language, effort & presentation skills), attitude (confidence, dressing sense, good attitude), behaviour (humble), psychology (fear, tension, anxiety, stress, sleep, nervousness, health issues, presence of mind, comfort, confusion, memory), peer performance pressures.
2	Luck factor	The topic studied/not studied, the order in which students were examined, questions (easy, difficult, number & complexity), picking up / allotment of the topic.
3	Examination related factors	The gap between exams (study time), quality of specimens/histology slides
4	Examiner related factors	Mood, patience, liberal/ strictness of examiner.

### Stress factors and their role

The students have stated the following factors responsible for stress during the practical examinations (Table 3)

**Table 3: Stress factors during the practical examination**

Sl. No	Stress factors categories	Stress factors
1.	Syllabus related factors	Vast syllabus, improper preparation, lack of time, memory.
2.	Student related factors	Exam fear/nervousness, peer/parental pressure, tension/anxiety, laziness, confusion, confidence, communication skills, bad performance in an earlier session, procrastination, less concentration after theory, sleep, preparedness.

3.	Examination related factors	Conduct of examination – time limit, same day practical & viva voce, the gap between exams, environment.
4.	External examiner related factors	Student related queries (regional status, qualifying scores, scolding), mood, fear, questions (type, way, complexity & topic)

## DISCUSSION

The feedback analysis hints at a need for the examination to be more objective. The scheduling of the practical examinations should be student-friendly with adequate time for preparations. The pattern of examination should stress uniformity with equal time and similar questions for all students. Emphasis should be made on the good quality of slides & specimens. More importance to be given to formative and continuous assessments than only the final assessment. The practical assessment pattern should be more skill-oriented on a check list basis. Guidelines to be laid down to the examiners to avoid bias of any category. The Competency-Based Medical Curriculum (CBME) aims at solving most of the deficiencies of the traditional practical examination. With the introduction of CBME, the focus in assessment is going to shift from assessment of learning to assessment for learning and formative feedback will be a crucial factor for competency development.<sup>4</sup>

Objective Structured Practical Examination (OSPE) a better choice as an assessment technique over the Traditional Practical Examination as it improves students' performance in a laboratory exercise.<sup>1</sup> Objective structured practical examination (OSPE) to be a significantly high scoring and preferred method of examination as compared to the Traditional Practical Examination (TDPE) in the assessment of laboratory component and viva voce of Physiology.<sup>2</sup> Pass percentage was higher by viva voce but high percentages and distinctions were by OSPE. Viva-voce needs to be continued as it is the only assessment tool that evaluates communication skills, power of explanation, interpretation, and confidence level and retention abilities of students.<sup>2</sup> Objective structured practical examination increases the objectivity and reduces subjectivity compared to conventional viva.<sup>5</sup>

## CONCLUSION

The students have felt the traditional practical examination to be fair, uniform, with no bias to a certain extent, yet stressful with chance factors such as luck, humble nature, dressing style, communication skills influencing their scores. It has also been reflected that examiner related factors also influ-

ence the student scores. The new competency-based medical curriculum has incorporated alternate methods of evaluation which will provide fair and consistent techniques for evaluating the students. A feedback if taken on the practical component of the competency-based assessment will reflect the advantages/disadvantages over the traditional assessment.

**Abbreviations used:** RGUHS - Rajiv Gandhi University of Health Sciences, CBME - Competency-Based Medical Curriculum, OSPE - Objective Structured Practical Examination, TDPE - Traditional Practical Examination, NA – not answered

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