

**Perception of Phase I MBBS students about implementation of objective structured Viva Voce as a part of formative assessment in Biochemistry.**

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**Abstract**

**Introduction:** Oral examination remains favourite of examiner because of high face validity, free hand to examiner about number of questions to be asked, flexibility of questions and many more. Many authors reported poor validity and reliability for oral examination because of unequal time distribution to student for viva, gender bias, non-uniformity of difficult questionnaire, full syllabus is not covered, examiner’s mood, and high anxiety in students, student’s

communication skill and so on. Hence, in present study we structured viva voce examination for Phase I MBBS undergraduates in Biochemistry and evaluated the perception of students.

**Material and methods:** After ethics committee approval, consent of the students was obtained. Students as well as faculties of the department were sensitized and oriented about the execution of this type of oral structured viva voce (OSVV). The feedback form (using Likert’s scale) preparation for students was followed by

validation from three MEU members. The OSVV sets were prepared and validated by the department faculties where the topic sequence, difficulty level, marks allotted for the question remains same. All the students as per the batch allotment were assessed for oral viva. One OSVV set was used for the day. Finally, the feedback was collected from all students. This pattern was followed for all the days of examination. Statistical analysis was done.

**Results:** The results showed the perception of the students in a favorable manner which is supported by a greater number of responses in the “agree” and “strongly agree” category.

**Conclusion:** The viva voce is taken in a structured manner will be able to have a reliable assessment of a student’s caliber rather than a performance by chance.

**Keywords:** Biochemistry, Objective structured oral viva (OSVV), Feedback

### **Introduction**

As defined by Joughin, Oral viva or oral assessment is “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>[1]</sup> Viva voce examination is focused on comprehension–application of the basic knowledge and concepts and its implicit logical confirmation. It is precisely toward analysing, creating, and evaluating the real depth of knowledge in the higher levels of cognitive domain.<sup>[2]</sup>

Oral examination remains favorite of examiner because of high face validity, free hand to examiner about number of questions to be asked, flexibility of questions and many more. Many authors reported poor validity and reliability for oral examination because of unequal time distribution to student for viva, gender bias, non-uniformity of difficult questionnaire, full syllabus is not

covered, examiner’s mood, and high anxiety in students, student’s communication skill and so on. Nevertheless, it has also been established that the viva session if carried out in appropriate manner, it is an effective tool of assessment that can measure the candidate’s knowledge, clinical skills, and attitude and communication skills at the same time.<sup>[3]</sup>

Hence this study was planned to assess the perception of students about Objective structured Viva Voce (OSVV) in Biochemistry.

### **Materials and methods**

#### **Study type and design**

120 students of Phase I MBBS were included in the study. Ethics committee approval was obtained. Consent from students was taken. Feedback after oral structured viva voce was collected and was analyzed with appropriate statistical test.

#### **Study-center**

Department of Biochemistry, Dr. Vasantao Pawar medical college, Hospital and research Centre Nashik.

#### **Study duration**

September 2022-November 2022

#### **Eligibility criteria**

##### **Inclusion criteria**

1. Students appearing for the formative assessment conducted during September 2022-November 2022

##### **Exclusion criteria**

1. Students who were absent for the formative assessment conducted during September 2022-December 2022
2. Students who were not willing to participate in the study.

#### **Methodology**

After ethics committee approval, the study was carried out as follows.

Students as well as faculties of the department were sensitized and oriented about the execution of this type of oral structured viva voce. For the preparation of the sets of OSVV, majority of topics included in the syllabus of formative assessment were finalized with discussion at the departmental level. The feedback form preparation for students was followed by validation from three MEU members. The OSVV sets were prepared and validated by the department faculties where the topic sequence, difficulty level, marks allotted for the question were kept same. All the students as per the batch allotment were assessed for oral viva. One OSVV set was used for the

whole day. Finally, the feedback was collected from all students. Next day, other set was used, followed by students' feedback. Likewise using a set of OSVV per day was followed. Statistical analysis of feedback obtained was done.

To avoid unfair means during this, following measures were taken-

1. Each student was given uniform time duration for OSVV. (15 minutes)
2. After the OSVV, student was not allowed to enter the practical laboratory again. (To avoid communication with other students)

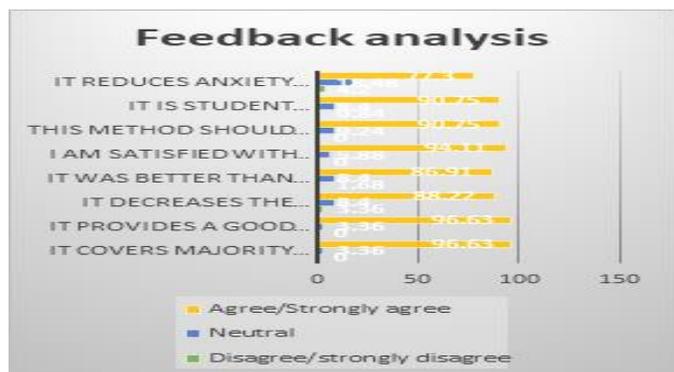
**Results**

Out of 120 students, 119 students participated in this study.

Table 1: Feedback Analysis (Number of students with percentage)

Question	Strongly disagree/ Disagree	Neutral	Agree/strongly agree
1.It covers majority of topics declared for internal assessment II	00	04(3.36%)	115(96.63%)
It provides a good learning experience	00	04(3.36%)	115(96.63%)
It decreases the Examiner's bias	04(3.36%)	10(8.40%)	105(88.22%)
It was better than the traditional viva conducted usually	02(1.68%)	10(8.40%)	107(86.91%)
I am satisfied with this viva process	00	07(5.88%)	112 (94.11%)
This method should be practiced routinely	00	11(9.24%)	108 (90.75%)
It is student cantered.	01(0.84%)	10(8.40%)	108 (90.75%)
It reduces anxiety of viva examination	05(4.20%)	22(18.48%)	92(77.30%)

Graph 1: Graphical presentation of the feedback received (question wise)



other comments/suggestions received were as follows.

1. It is a good process of viva.
2. It is better than traditional viva.
3. It is a good new experience
4. It should be followed by all departments.
5. It included almost all topics hence viva was not restricted to one topic which we may have kept for options.
6. It helped to focus on one question at a time

**Discussion**

The viva voce examination is a component of assessment taken up by the medical schools. It is an

integral part of assessment owing to its flexibility and scope for testing cognitive skills of higher order as well as skills. Interaction during the viva could be an important in assessing attitude and communication skills as well. Our results showed the perception of the students in a favorable manner which is supported by 86-96% of responses in the “agree” and “strongly agree” options. These results are in accordance with

Ashok Jay Kumar Van Kuder et al.<sup>(3)</sup>. In our study, about 90% students preferred to have this OSVV as a routine pattern which supports the study done by Shah H K et al.<sup>[4]</sup>

Our results also showed that there was no bias as questions were uniform for all the students, followed by equal time allotment, reduced anxiety of students as well as coverage of the major topics of syllabus. These findings are similar to the study done by Dr. D. Ponnudhali et al.<sup>[5]</sup>, Sufi Naseem et al.<sup>[6]</sup> Examiners bias being a major factor to influence the viva process is totally removed by this structured viva process (88.22%) This finding is also in accordance of study by Priti P Puppalwar et al.<sup>[7]</sup>

96.63% students reported this method of viva voce as a good experience while 90.75% students opined to practice it regularly.

Hence, if the viva voce is taken in a structured manner, it will be able to have a reliable assessment of a student's caliber rather than a performance by chance.

### Conclusion

Student's perception of OSVV was very much positive and was almost up to the satisfaction. It is a very powerful tool of assessment though few limitations can be encountered.

### Limitations

Our concerns were time consumption, more faculties as resources, more brainstorming for preparation of OSVV.

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