

Objective Structured Viva Examination Versus Traditional Viva Examination in Evaluation of Medical Students

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Abstract

The Objective Structured Viva Examination (OSVE) is a new concept which is similar to Objective Structured Clinical Examination (OSCE) in pre and para clinical subjects. These methods though known as unbiased method of examination has not been incorporated as an assessment tool in the curriculum of first year medical students. This study was conducted to compare the marks obtained in OSVE and the marks of traditional viva. It was found that OSVE was a very authentic tool for judging the different cognitions of the student but was not allowing the student freedom to speak as in traditional viva. This study has shown that OSVE cannot replace the existing pattern of practical examination but can supplement it. Any change must first be thoroughly evaluated before it can uproot a well-defined and time-tested assessment methodology.

Objective: Assessment for practical skills in medical education needs improvement from subjective methods to objective ones. An Objective Structured Viva Examination (OSVE) has been considered as one such method. This study is an attempt to evaluate the feasibility of using OSVE as a tool for the formative assessment of undergraduate medical education in anatomy.

Materials and Methods: 50 students of first year MBBS, at the end of the first term, were assessed by both the traditional practical examination and the Objective Structured Viva Examination (OSVE), which included a part, that is thorax. A ten-station OSVE was conducted along with the traditional viva examination (TVE). The scores obtained in both were compared and a feedback of students was taken for the two methods.

Results: There was no significant difference in the mean scores between the two methods ($P=0.31$) using the unpaired t test. Regarding the students' perceptions of OSVE compared to TVE, 78% responded that OSVE could partially or completely replace TVE as the feedback of the students. OSVE was judged as an objective and unbiased test as compared to TVE, by 82.6% of the students, but to test the other capabilities like communication skills, correlative representation and the holistic approach of the students traditional viva examination is a must.

Conclusion: Use of OSVE is feasible and unbiased tool for assessment in the undergraduate curriculum.

Keywords: Assessment tool; Feasibility; Internal evaluation; Objectivity

Introduction

Assessment drives learning. Assessment of students in medicine has always remained a controversial topic. Examination conduction is done intermittently to assess the level of knowledge of students and depending on their performance is their promotion to the next level. There are continuous attempts to make assessment more objective and reliable rather than subjective. Traditional, age-old methods like 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. Despite this, 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 intimidating 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 and problem solving ability of the students. As far as skills assessment is concerned the conventional methods are not only subjective in nature, but also lack scope for direct observation of the performance of skills by the assessor. Moreover the coverage of contents may be limited. Hence, attempts have been made to introduce methods that can overcome the above-mentioned limitations.

One step in this direction is the Objective Structured Viva Examination (OSVE) described in 1975, by Harden et al., at the Dundee University, for assessment in clinical subjects, which has been a useful tool in this regard [1]. The OSVE had been introduced as a reliable approach to assess the students. It is a flexible test format based on a circuit of 'stations'. At each station, a specific leaning objective is tested [2]. The OSVE has been widely used for formative and summative assessment in various medical disciplines worldwide, including the non-clinical disciplines [3].

Aims and Objectives

1. To compare the traditional viva examination (TVE) with OSVE (Objective Structured Viva Examination).
2. To obtain the students' opinion regarding OSVE as an assessment tool.
3. A suggestion to include OSVE as a part of university examination.

Materials and Methods

The study was carried out in November 2012, at K.J. Somaiya Medical College, in the department of Anatomy. 50 students were exposed to different stations of viva as well as OSVE. A comparison was made of the student's performance and a feedback was taken from the students regarding the same.

As the OSVE was being conducted for the first time, the students were notified in advance regarding the plan for conducting the part ending practical assessment – by both the TVE and OSVE. The OSVE was planned for 20 marks, viva voce of 20 marks.

After the examination, feedback was obtained from the students with the help of a pre-validated questionnaire. Questions pertaining to the students' perceptions regarding OSVE compared to TVE, the difficulties they faced, and their opinions regarding inclusion of OSVE as an assessment method, were included.

Results

Out of 50 students in the first year M.B, B.S., 47 students took both the tests – TVE and OSVE. The mean scores out of 20 were 14 ± 3 for TVE and for OSVE the mean scores out of 20 were 16 ± 4 , respectively. This showed that the mean scores for OSVE was more as compared to the TVE because the questions were specific, the fright of facing the examiners was not there and the students could put in their best.

Students' Perceptions of Objective Structured Viva Examination Compared to Traditional Viva Examination

Out of 47 students who took both the tests, 40 responded to the feedback questionnaire. In response to the question related to difficulty level, 32 (80%) rated OSVE easier than TVE, 4 (10%) stated that it was the same as TVE, 3 (10%) found OSVE more difficult. 30 (75%) of the students felt that OSVE is less time consuming as compared to the TVE. 28 (70%) of the students were of the opinion that OSVE had a broader coverage of the content, 8 (20%) felt that TVE covered the course better, while the remaining 4 (10%) were uncertain about it. 40 (90%) of the students OSVE was objective and unbiased as compared to TVE, 2 (10%) were uncertain.

Discussion

The OSVE has been advocated for the practical assessment of preclinical and paraclinical subjects. An attempt was made to test the feasibility and acceptability of implementing this method in the internal assessment by comparing it with TVE, and also by obtaining the students' opinion, with the help of a feedback questionnaire.

The criterion of a good examination includes validity, reliability, objectivity, practicability, relevance, and promotion of learning, power

to discriminate between students, relaxed environment and a positive student feedback [4].

The results suggest that OSVE is a more precise and unbiased way of practical examination. All students were facing a prevalidated questionnaire hence no question of discrimination. Time consumption by OSVE is less than TVE. Traditional method of examination gives the student a chance to present his communication skills which he is unable to do in OSVE. Communication skills are a must to develop for an upcoming doctor. A holistic approach towards the subject is difficult with OSVE. Different levels of cognition can be tested by OSVE in the specified time [5].

As all the students were exposed to both the types of examinations, TVE and OSVE, the student's perspective regarding both methods of examination could be taken. OSVE tests the student in cognitive aspects like recall and interpretation. TVE also rely on the communication skills of the student. Question stations for OSVE would have to be elaborately designed if they are to be used instead of TVE.

Communication is one of the most important components of physician – patient management skills [6]. In our study there was no station to evaluate communication skills.

If we are to discontinue any method we must be aware of the possible consequences on learning [7]. The OSVE-like OSCE is associated with "achieving" style of learning but not with "meaning" or "reproducing" style of learning [8]. The OSVE complements other methods of assessment. It allows us to directly observe the student, give similar questions to all students, check on minute details in order to standardize and focus our evaluation, to be more objective and unbiased in marking [9]. On the other hand our conventional methods allow for an in-depth analysis of the subject, with more interaction between the examiner and the student. The examiner's professional judgment and experience can make the examination a learning exercise as it provides an instant feedback to the student [10]. These advantages justify their inclusion.

Conclusion

In the present set up OSVE cannot replace TVE but a combination of both the methodologies should be used. Before conduction of OSVE it is a must to get the questionnaire prevalidated and it should be kept in mind that the questionnaire is testing all the domains of the student. Still we need to conduct a lot of studies to be certain that OSVE can be included as part of the University examination in combination with the traditional methods.

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