

COMMENTARY

OSPE In Pharmacology - Students Perspective

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ABSTRACT

Students' perspective about OSPE was assessed in 2012. They responded on pre-examination arrangement, time allocation, number of stations; content, process, process explanation, quality of questions, marks allocation, faculty behavior, overall atmosphere and comments about OSPE experience and its comparison to conventional pattern. Student's responses were graded as good (combining agree and strongly agree), poor (combining disagree and strongly disagree) or neutral. Of 102 students, ninety students (88%) responded to questionnaire at the end of all four examinations. 87.65% students found pre-examination arrangement good while 86.5% were happy with explanation of procedure. 89% felt faculty behavior satisfactory, 82.5% considered OSPE process smooth, 86% expressed satisfaction with quality of questions, 79.5% considered number of stations adequate, 86.75% believed time adequate, 87% concluded that content was adequately covered. 86.87% considered atmosphere conducive and 81.25% considered marks justified. Students' overwhelmingly found OSPE in Pharmacology an effective method of assessment.

KEY WORDS: OSPE, Students' perspective, Questionnaire, Structured viva, Module exam, Assessment

Bahria University Medical and Dental College (BUMDC) since its inception in 2008 has followed a modular curriculum for MBBS in all basic health sciences subjects. Students' learning objectives are designed for each of these modules separately. Multiple methods of assessment including MCQs are used to assess knowledge objectives while OSPE (Objectively Structured Practical Evaluation) cover laboratory skills. Curriculum planners of third year of Pharmacology department deviated from traditional practical assessment and developed OSPE with emphasis on interpretation & experimental skills both. All students started and ended at the same time

The term Objective Structured Practical Evaluation (OSPE) has been derived from Objective Structured Clinical Evaluation in 1975. Later it was extended to practical examination and modified by Harden and Gleeson.¹ The conventional method of practical assessment has fallen into disrepute because of its subjectivity that can affect the results. Also performance of a single experiment by the student cannot give the true picture of the outcome of individual competencies.² OSPE was developed to overcome these pitfalls, where students perform different tasks at different stations.³ OSPE has also reported to test the mental attendance and students' attitude during time of practical demonstration and performance.⁴ Moreover, OSPE is a reliable method that can discriminate between good and poor performers which is not possible with conventional method of examination.⁵ OSPE also helps in integration of teaching and a variety of questions at different stations enhance students' interest.⁶ OSPE is being increasingly used both

in the developed world and developing countries like India and Nepal mainly due to benefits like objectivity and reliability.⁷ If OSPE/OSCE is designed appropriately it can be useful for students to identify their own deficiencies and strategies to overcome them.⁸ BUMDC has introduced three modules in one academic year. Each module consists of two Class Assessment Tests (CAT 1 and 2), and a final comprehensive modular assessment comprising of written and practical held on two separate days. OSPE has been conducted in BUMDC Pharmacology department since its inception in 2011. We tried to minimize the time of students spent in the examination process which therefore decreases the stress level of students without compromising on the quality of assessment. Student feedback is extremely necessary when introducing a new assessment practice as based on their comments further improvement of this practice is possible. Students were asked to complete a ten item questionnaire based on 5 point Likert scale at the end of each module and final professional exam 2012 after a verbal consent.⁹

A total of 102 students were divided into three practical groups A, B and C, each with 34 students and OSPE was held on three consecutive days. OSPE consisted of two circuits, first with 34 stations, that is, 25 working and 9 resting stations of 2 minutes duration. First circuit included questions relevant to the practical objectives of respective module printed in the students' study guide book. A team comprising of the faculty of pharmacology prepared a table of specification to ensure adequate coverage of content. The OSPE process was structured and all students started and ended at the same time. After a break of thirty minutes, the second circuit started and students experienced four interactive stations comprising of case based structured viva of 5 minutes duration. Percentages were calculated for each item.

Majority of students were of the view that OSPE involved greater coverage of the curriculum, a better opportunity to score marks as number of stations was ample and questions were focused. Moreover, this method decreased anxiety and examiners' bias as the group of students started and ended at the same time, and faced same

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questions. Students appreciated pre-examination arrangements like venue, seating which facilitated smooth flow between the stations. Similarly, prior to OSPE, the process was explained to students on number of stations, time duration and direction of movement for the stations.

Pharmacology department faculty gave the instructions and guided students to avoid any chaos and mistakes. Students overwhelmingly expressed satisfaction with the tasks that were consistent with the module content, flow between different stations and time allocated for each station. These findings are consistent with the study done by Wani regarding students' perception of OSPE. They also calculated percentages of responses; however they organized their questionnaire into themes and had included comparison with the conventional method and OSPE as a learning tool. 10 Other researchers like Menezes through a ten item questionnaire based on five point likert scale also have reported that students were strongly of the view that OSPE tested a wider range of skills, and was a good form of examination as well as a learning experience. 11 Same was the finding of Shankar and colleagues. 12 Furthermore Zia-ud-din Medical University Karachi 5 CMH Lahore Medical College and Shifa College of Medicine, Islamabad have also concluded that OSPE is an effective assessment tool. 13, 14

Classical OSPE as mentioned in literature requires ample space, greater number of faculty members, adequate technical support and more planning in terms of table of specifications and questions preparation. Also checking of papers by the faculty becomes a more laborious task.

Classical OSPE also focus on integration of the basic sciences with the clinical sciences which create more interest of the subject among the students. 15 In our case integration with clinical sciences was lacking as the students were not accustomed to the practice; however clinical scenarios were used with a pharmacological perspective. Our cumulative results (as shown in Table 1) of all the four responses showed that 80% of the third year students were in favor of the OSPE pattern of examination. Students were happy with the pre-exam arrangements, quality of questions, coverage of syllabus and overall atmosphere in the exam. However students provided valuable suggestions on the flow between stations and the time given at each station. These few comments will guide us to refine our practice in future. For the former we will place more directional displays & for the latter we will increase the time to 3 minutes on each station.

We conclude that BUMDC third year MBBS students' found OSPE in Pharmacology, an effective assessment tool. Students seemed satisfied with this format, and their scores. The curriculum taught in medical schools throughout Pakistan is as per Pakistan Medical and Dental Council guidelines. However, remaining within these guidelines, BUMDC- Pharmacology introduced OSPE incorporating interpretation & experimental performance simultaneously as a method of assessment to evaluate students comprehensively, to increase students' interest due to relevance, to decrease bias and to eventually reduce stress and anxiety among students.

Table 1 Grading of Student's Responses

S. No.	Items	Good	Neutral	Poor
1	Pre exam arrangements	87.34	6.67	5.95
2	Process explained	86.70	6.1	7.15
3	Helpful faculty	88.19	5.62	5.37
4	Smooth flow	81.71	9.16	7.68
5	Quality of questions	85.95	7.36	8.58
6	Adequate stations	79.90	12.5	7.66
7	Adequate time	87.31	7.27	21.26
8	Syllabus covered	86.78	7.77	5.88
9	Overall atmosphere	87.20	6.65	6.66
10	Allocation of marks	79	9.67	9.18

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