

## Introducing Objective Structured Practical Examination In Physiotherapy

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**Abstracts:** Background: Objective Structured Clinical Examination (OSCE) and Objective Structured Practical Examination (OSPE) are newer methods of performance assessment which take care of challenges of the traditional performance assessment methods. The purpose of study was to introduce OSPE in physiotherapy undergraduate practical examination. Methods: The study was conducted at Dr. D. Y. Patil College of Physiotherapy, Pune, for 37 students in the second year. Four OSPE stations were created for assessing students on their practical skills in the subject of kinesiotherapy. After the OSPE, feedback was taken from the students and examiners on the format of the exam. Results: 56% students felt that practical skills were tested better and 59.4% students reported that OSPE helped them to develop confidence over subject. 51.3% students felt that the OSPE should be the pattern of examination in the physiotherapy. 75% of examiners felt that OSPE tested objectivity and it is also easy to administer. Teacher recommended that OSPE should be introduced in the physiotherapy examinations. Discussion: This study showed that OSPE was well accepted by the students, and it is feasible to introduce OSPE in the physiotherapy examination. [Baxi G NJIRM 2015; 6(5): 86-89]

**Key Words:** OSPE, Assessment, Practical examination, Traditional examination, Physiotherapy.

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**Introduction:** The traditional pattern of practical examination has several problems as reported by previous studies.<sup>1,2,3</sup> There are issues related to reliability and validity, arising due to lack of objectivity in traditional practical exams.<sup>4</sup> The marks awarded in the traditional pattern are not based on demonstration of individual competencies, rather reflect only the global performance of the candidate. Communication skills significantly affect the outcome. The traditional pattern of examination makes assessment of attitudes difficult. The ability of students to examine a patient and arriving at a decision is not always observed by the examiners. The examiners end up giving final scores to the students without any significant feedback regarding their performance. Newer methods of assessment are available to take care of the challenges arising with traditional exams.<sup>1,2,3</sup>

One of them is the objective structured clinical examination (OSCE), which was later extended to the practical examination (OSPE) described by Harden and his group from Dundee almost 40 years ago.<sup>5,6</sup> The challenges of the traditional clinical and practical examinations mentioned above have been largely overcome by these newer methods of assessment.

OSPE has been recommended as an alternative instrument for the assessment of practical examinations.<sup>7</sup> In this, all educational objectives of an exercise can be assessed through a structured assessment pattern. In OSPE, we can frame the questions for assessing skills relevant for medical undergraduate training. Objectivity and uniformity in the questions and marking of students make OSPE better than traditional pattern of examinations.<sup>8</sup>

At present OSPE is used for assessment at a few medical colleges in India, in addition with other conventional assessment tools, and is being allotted a small percentage of marks.<sup>4,9</sup> Till date no study has reported the introduction of OSPE in physiotherapy practical examination in India. The purpose of this pilot study is to see the feasibility and effectiveness of an OSPE in physiotherapy undergraduate practical examination.

**Material and Methods:** The study was conducted at Dr. D. Y. Patil College of Physiotherapy, Pune, for the second year students. An orientation session was conducted for the students to acquaint them of the format of the examination, and to solve queries which they would have. Four OSPE stations were created for assessing students on their

practical skills in the subject of kinesiotherapy. The duration of each station was for five minutes. The exam was conducted as a term end exam, with the intention of providing them feedback on their performance. Two teachers were stationed at each of the four OSPE stations. A peer reviewed questionnaire was used for collecting feedback from the students and examiners on the format of the exam.

**Results:** 37 students of second year participated in this study. Table below 1 shows students' feedback

regarding the OSPE. 56% of students felt that the practical skills were tested better and 59.4% gave a feedback that OSPE help them to develop confidence over the subject. 62.1% students felt that this type of assessment will stimulate their learning in the future. Nevertheless, 64.8% of the students felt that the time given for each station was too short. 51.3% students felt that the OSPE should be the pattern of examination in the physiotherapy. 62% students felt that OSPE eliminates evaluator bias.

**Table 1: Students feedback regarding OSPE**

Questions	Yes		No		To Some Extent	
	Number	%	Number	%	Number	%
1. Do you feel that exam was fair?	26	70.2	06	16.2	05	13.5
2. Do you feel that your practical skills were tested better?	21	56.7	11	29.7	05	13.5
3. Do you feel that this method of assessment helped you to identify your deficiency in learning?	15	40.5	10	27	12	32.4
4. Do you feel that this method of assessment helped you to develop confidence over the subject?	22	59.4	06	16.2	09	24.3
5. Does this type of assessment stimulate your learning in the future?	23	62.1	10	27	04	10.8
6. Do you think you need more time in each station?	24	64.8	04	10.8	09	24.3
7. Was the exam well organized?	28	75.6	06	16.2	03	8
8. Was the exam stressful?	09	24.3	09	24.3	19	51.3
9. Do you enjoy the pattern of this assessment?	14	37.8	07	18.9	16	43.2
10. OSPE is easier to pass	10	27	14	37.8	13	35.1
11. OSPE should be followed in the Physiotherapy examination.	19	51.3	12	32.4	06	16.2
12. Does OSPE provide chance to score better	16	43.2	09	24.3	12	32.4
13. Does it eliminate evaluator bias?	23	62	02	5	12	32.4
14. Does OSPE covered a wide range of knowledge compared with traditional pattern?	12	32.4	16	43.2	09	24.3

**Table 2** shows teachers' feedback regarding OSPE. 75% teachers felt that OSPE tested objectivity and it is also easy to administer. 87.% teachers felt that OSPE is different from the traditional pattern of examination and that OSPE does not cover the

wide range of knowledge compared to traditional pattern. 87.5% teachers felt that this type of assessment gives feedback of their teaching. 62% teachers recommended the introduction of OSPE in physiotherapy examination.

**Table 3: Teachers feedback regarding the OSPE**

Questions	Yes		No		To Some Extent	
	Number	%	Number	%	Number	%
1. Does OSPE tested objectivity?	06	75	00	00	02	25
2. Does OSPE measured practical skill better?	03	37.5	00	00	05	62.5
3. Does OSPE eliminate examiner bias?	03	37.5	02	25	03	37.5
4. OSPE is more time consuming.	01	12.5	07	87.5	00	00
5. OSPE is easy to administer.	07	87.5	00	00	01	12.5
6. Does OSPE provide uniform assessment of whole class?	08	100	00	00	00	00
7. Do you recommend introduction of OSPE in physiotherapy examination?	03	37.5	00	00	05	62.5
8. Do you feel that OSPE help to develop confidence over the subjects?	01	12.5	00	00	07	87.5
9. OSPE is same as the traditional pattern of assessment?	00	00	07	87.5	01	12.5
10. Students were comfortable.	01	12.5	05	62.5	02	25
11. Students were stressful.	03	37.5	01	12.5	04	50
12. Does student shows interest in OSPE?	03	37.5	01	12.5	04	50
13. Does OSPE covered a wide range of knowledge compared with traditional pattern?	00	00	07	87.5	01	12.5
14. Does this type of assessment improve student learning?	02	25	00	00	06	75
15. Does this type of assessment give feedback on your teaching?	07	87.5	00	00	01	12.5

**Discussion:** This study was conducted to see the feasibility and effectiveness of an OSPE in physiotherapy undergraduate practical examination. Several studies have proved the objective structured practical examination as a reliable assessment tool.<sup>10,11</sup> Studies have reported that OSPE is an effective tool in discriminating between good and poor performers in practical examinations of medical subjects.<sup>12,13</sup> Till date, no study has examined the effectiveness and feasibility of OSPE in physiotherapy examination in India. Though the majority of students did not perform well in OSPE, still 56 % felt that the practical skills were tested better, and that the OSPE helped them to develop confidence over subject. Furthermore, 62.1% students also felt that this type of assessment will stimulate their learning in the future. 51.3% students felt that the OSPE should be the pattern of examination in the physiotherapy. 75% of teachers felt that OSPE tested objectivity and it is easy to administer. 62% teachers felt that to some extent it is recommended the introduction of OSPE in physiotherapy examination.

**Limitations:** The assessment of students in the present study has a few limitations. The number of OSPE stations was small. A proper blueprint should be prepared, before finalizing the OSCE stations. A comparison between traditional examination score and OSPE score is recommended, with more number of students and more number of stations, prepared after detailed blueprinting.

**Conclusion:** The present study demonstrates that the OSPE is well accepted by physiotherapy students, and it is feasible to introduce OSPE in the physiotherapy examination. Faculty also found the method of assessment useful. Faculty training, and creating OSPE and OSCE banks is required, before considering implementation at the University level.

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Conflict of interest: None
Funding: None
Cite this Article as: Palekar T, Baxi G, Anwer S, Introducing Objective Structured Practical Examination In Physiotherapy. <i>Natl J Integr Res Med</i> 2015; 6(5): 86-89