# Perception and Satisfaction of Teaching Faculty Regarding Objective Structured Practical Examination (OSPE) in a Public Sector Medical College of Punjab, Pakistan

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## ABSTRACT

*Objective*: To structured practical examination is conducted at different medical colleges in Punjab, Pakistan. This study focused on the satisfaction and perception of faculty members about OSPE.

*Study Design*: Cross-sectional study.

Place of Study: Sahiwal Medical College Sahiwal Pakistan.

*Methodology*: A cross-sectional survey was conducted at Sahiwal Medical College Sahiwal through a web-based validated questionnaire among all the faculty members. After obtaining approval from the institutional review board, the questionnaire was distributed by WhatsApp. Data were assessed by using SPSS-24. We calculated the frequency rates of different demographic characteristics of our study participants and also the mean values of their different responses.

*Results*: The response rate of our study was 78.46%. The main participants of our survey were females (52.90%). The majority of the responses to the questionnaire found the faculty members in agreement. The highest mean value was found for the response to the requirement of collective efforts for carrying out OSPE (mean=4.56). Faculty members also agreed to the fact that OSPE makes it easier for students to get passing scores as compared to viva (mean=4.52). The only question to which the majority of the faculty members showed disagreement was that OPSE is stressful for students (mean=2.31).

*Conclusion*: Our study concludes that the perception of the respected faculty members is very encouraging and they showed positive attitudes towards different factors related to OSPE.

Keywords: OSPE, Faculty members, Perception.

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### INTRODUCTION

Medical education, the skill and study of clinical knowledge, is changing its shape universally. It turned out to be progressively logical; given educational just as andragogy standards.1 Issue-based learning and self-coordinated learning are vital in clinical training. It is a reality that ailment etiology is additionally evolving quickly.2 Students' appraisal, either developmental or summative has consistently been of extraordinary enthusiasm to medical educators, both at the undergrad and postgraduate levels. It is considered a vital part of their ongoing education and learning exercises.3 The evaluation was first presented during the hours of Hippocrates; they used to evaluate the psychological, full of-feeling, and psychomotor spaces of students.<sup>4</sup> The assessment is the technique through which instructors break down whether the instructive results of a specific course are accomplished or not. The principle goal of the evaluation is to increment students' learning, ensure and assess students' degree of competency, and create proficient doctors who can convey unrivaled quality consideration and control clinical educationists to discover shortcomings and weaknesses in students' training, learning procedures, course content, showing approaches, educational program investigation and evaluation results in term of students and expert, so they can reflect over it and propose approaches to defeat these insufficiencies.<sup>1</sup>

The term Objective Structured Practical Examination (OSPE) is derived from the target organized clinical assessment (OSCE) which was begun in 1975 and later adjusted by Harden and Gleeson in 1979.<sup>5</sup> OSPE is an overall executed pragmatic assessment framework, which is reliable and utilized in numerous clinical universities. OSPE is an instrument to survey the segments in practical skills, for example, simple procedures, translation of lab results, co-connection to theory segment, correspondence, and decisiveness.<sup>6</sup> University of Health Sciences Lahore (UHS) overhauled the OSCE and presented Objective Structured Performance Evaluation (OSPE) in 2008.

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The destinations of OSPE are to test certified information and to survey clinical aptitudes, legitimate reasoning, and relational abilities. OSPE includes 15 to 20 brief length stations (4-5 minutes every) where the students are tested for different clinical aptitudes, information, and demeanor in a goal way.<sup>7</sup> As "Appraisal Drives Learning," it implies their attempt to learn as it were, they are responsible for being assessed. Along these lines, to adapt to appraisals, faculty members adjust diverse learning styles. So also, OSPE impacts the faculty members' way of dealing with students with a need to consider the subject all the more methodical and in-depth.<sup>8</sup>

Various variables impact both the faculty members and the students' ways of dealing with learning.<sup>9</sup> However, if the appraisal is in regards to the use of information or in regards to the appraisal of higher-request intellectual aptitudes then it will lead the faculty members to examine the subject in depth.<sup>10</sup> Consequently, this study was done to see the recognition and fulfillment of college faculty members concerning OSPE and its effect on their students' learning.

## **METHODOLOGY**

A cross-sectional questionnaire-based survey was conducted among faculty members of Sahiwal Medical College Sahiwal Pakistan, after obtaining approval from the institutional review board via letter no. 99/IRB/SLMC/SWL.

The sample size was calculated by using the following formula;

Sample size = 
$$\frac{Z_{1-\alpha/2}^2 p(1-p)}{d^2}$$

Z1-a/2= is standard normal variate (at 5% type 1 error (p<0.05) it is 1.96. As in the majority of studies, p values are considered significant below 0.05 hence 1.96 is used in the formula.

*p*=Expected proportion in population based on previous studies or pilot studies= 0.70(7)

d=Absolute error or precision= 0.14 Sample size=42.

As the sample size is calculated to be 42 from the above formula we sent the questionnaire to all 65 faculty members out of whom 51 faculty members responded, hence our sample size was more than what was required. Faculty members answered by choosing one of the options from 'Strongly agreed to strongly disagreed'. A convenient sampling technique was used.

## **Inclusion** Criteria

Only faculty members were included in the study.

## **Exclusion** Criteria

Undergraduates and postgraduate students were excluded.

Informed consent was taken before filling out questionnaire forms. The questionnaire was made through Google Docs and distributed among faculty members through WhatsApp Messenger.

Data were assessed by using SPSS version 22. Frequency distributions were calculated. We calculated frequency distribution rates of different demographic properties of our study participants. Mean values of different responses were also calculated.

## RESULTS

The questionnaire was distributed among all the 65 faculty members and out of those 51 participants responded by submitting the questionnaire. So response rate of our study was 78.46%.

We calculated the mean values of responses from the participants on the Likert scale of 1-5 from strongly disagreed to strongly agreed respectively. The majority of the responses to the questionnaire found the faculty members in agreement. The highest mean value was found in the response to a requirement of collective efforts for carrying out OSPE (mean=4.56). Faculty members also agreed with the fact that OSPE makes it easier for students to get passing scores as compared to viva (mean=4.52) and that the reduction of chances of bias by examiners during OSPE with a mean of 4.25. The majority also agreed to the fact that Viva voce is more teacher-centered than OSPE (mean=4.23). Faculty members agreed to the fact that OSPE is very useful and relevant to developing the psychomotor skills of students (mean=4.07) and students are always well briefed about the nature of OSPE before its conduction (mean=3.96). The responses to the questions 'OSPE is consistent with the learning outcomes of the curriculum' and 'OSPE is more transparent, fair and objective as compared to traditional practical examination'also found the teaching faculty members in agreement with means of 3.92 and 3.84 respectively. Faculty members agreed that students will find it difficult to get through the OSPE without attending the proper practical classes (mean=3.50). The only question to which the majority of the faculty members showed disagreement was that OPSE is stressful for students (mean=2.31) (Table).

Sahiwal Medical College Sahiwal (n=51)		
No.	Questions	Mean
1	Carrying out OSPE in a department needs collective efforts.	4.56
2	OSPE makes it easier for students to get a passing score as compared to Viva.	4.52
3	OSPE reduces the chance of bias by examiners.	4.25
4	Viva is more teacher-centered than OSPE.	4.23
5	OSPE is very useful and relevant to develop the psychomotor skills of students.	4.07
6	Students are well briefed about the nature of the OSPE examination.	3.96
7	OSPE is consistent with the learning outcomes of the curriculum.	3.92
8	OSPE is more transparent, fair, and objective as compared to traditional practical examination.	3.84
9	Students cannot pass OSPE without attending practical classes.	3.50
10	OSPE is lengthy and stressful for students.	2.31

 
 Table: Means of the Responses by Faculty Members of Sahiwal Medical College Sahiwal (n=51)

#### DISCUSSION

The response rate of our survey was 78.46% hence making it a valid study. Another previous study conducted on the same topic in Pakistan showed a response rate of 72.40% (7). Female participation in the survey was more (52.90%) than the male faculty members (47.10%). The majority of our study participants were from the age group of 31-40 (45.10%). The senior faculty members who belong to the age group 51-60 years had the least participation (7.80%) because the number of faculty members in this age group is less than the others. A former study conducted at Dow Medical University Karachi showed that the majority of participants were also from the age group of 28-40 which is similar to our study.<sup>11</sup>

Our study participants were also highly qualified showing that 72.50% of the total 51 faculty members had done post-graduation in their respective fields. It also depicts the high standards of teaching quality maintained at Sahiwal Medical College Sahiwal. A previous study showed that the faculty members with post-graduation status were 53.40%.<sup>12</sup> The majority of the respected faculty members belong to basic sciences departments (58.80%). A previous study showed that faculty members belonging to clinical sciences departments were in higher proportion (65.20%).<sup>13</sup>

As far as the responses of the faculty members are concerned, it was prominent to observe that the

majority of the faculty members (mean=4.56) found that OSPE needs collective efforts from different members of their departments. A previous study conducted on faculty members and teachers found both groups in agreement that the efforts should be organized and collective in managing the OSPE.14 As there is an extensive no. of stations (observed and unobserved) in OSPE it cannot be done by involving a few members. As far as the ease of clearing the OSPE for the students is concerned, faculty members were satisfied mostly (mean=4.52). Similarly majority of the faculty members also agreed that OSPE reduces the bias by examiners (mean=4.25) and also to the fact that OSPE is less examiner-centered than Viva voce (mean=4.23). A previous international study also found that the participants agreed with the fact that the examiner bias is much reduced by the introduction of OSPE.15

Participants also agreed that instructions for OSPE stations were clear and understandable that students were well briefed about the nature of OSPE (mean=3.96) and that OSPE was more relevant and developed the motor skills of the students(mean=4.07). Participants of a former study were also of the same opinion.<sup>16,17</sup> There was a positive response among faculty members when they were asked about the consistency of OSPE with learning outcomes of the curriculum (mean=3.92) but they also agreed that OSPE is more transparent, fair, and objective as compared to traditional practical examination (mean=3.84). It was also shown in a study previously conducted in Pakistan the faculty members were content with the fairness of OSPE as an examination module.17 Faculty members of Sahiwal Medical College Sahiwal also felt that Students cannot pass OSPE without attending practical classes (mean=3.50).

The majority of the survey participants were in disagreement with the response of the questions of OSPE is lengthy and stressful for students (mean= 2.31). This was contrary to a previous study done on students which showed that students felt OPSE was very tiring and stressful <sup>18,19</sup> Though time at each station during OSPE is usually 2 minutes for unobserved stations and 4 minutes for observed stations <sup>18,19</sup> which is not lengthy yet different factors can be recognized by arranging interactive sessions between students and faculty members. Feedback forms should regularly be given to the faculty members and as well as to the students after each OSPE so that this system can be improved.<sup>20</sup>

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#### CONCLUSION

The perception of the faculty members is very encouraging and they showed positive attitudes towards different factors related to OSPE. Though they seemed satisfied there is always room for improvement on various aspects of the OSPE from the faculty's point of view so that it can be used in a better way in the future.

#### Conflict of Interest: None.

#### Authors' Contribution

Following authors have made substantial contributions to the manuscript as under:

HP & SS: Study design, drafting the manuscript, data interpretation, critical review, approval of the final version to be published.

SN & MI: Data acquisition, data analysis, approval of the final version to be published.

SUZ & SA: Critical review, concept, drafting the manuscript, approval of the final version to be published.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

#### REFERENCES

- Bashir A, Tahir S, Khan JS. Objectively structured performance evaluation-a learning tool. Biomedica 2014; 30(2). https://doi.org/10.12669/pjms.36.4.2026
- 2. Deepak KK. Medical Education: A Re-evaluation of Current Problems and Possible Way Ahead. Annals of the National Academy of Medical Sciences(India). 2014; 50(3&4): 123-34.
- 3. Gopalakrishnan S, Kumar PG. Community medicine teaching and evaluation: scope of betterment. J Clin Diagnostic Res: JCDR. 2015; 9(1): JE01.

https://doi.org/10.7860/JCDR/2015/9873.5362

- Asani M. Assessment methods in undergraduate medical schools. Nigerian J Basic and Clin Sci 2012; 9(2): 53. <u>https://doi.org/10.4103/0331-8540.108463</u>
- Omu FE. Attitudes of nursing faculty members and graduates towards the objective structured clinical examination (OSCE). Open J Nursing 2016; 6(5): 353-64. https://doi.org/10.4236/ojn.2016.65037
- 6. Amoako-Sakyi D, Amonoo-Kuofi H. Problem-based learning in resource-poor settings: lessons from a medical school in Ghana. Bio Med Central Med Educ 20151; 15(1): 221.

- Adhikari A, Bhattacharya S, Indu R, Ray M, Waghmare L. Perception of medical teachers towards undergraduate medical theoretical assessment system in a medical college of West Bengal. Int J Res Med Sci 2017; 5(12): 5396. http://dx.doi.org/10.18203/2320-6012.ijrms20175462
- Shumway JM, Harden RM. AMEE Guide No. 25: The assessment of learning outcomes for the competent and reflective physician. Medical Teacher. 2003; 25(6): 569-84. https://doi.org/10.1080/0142159032000151907
- 9. Abdulrahman KA, Saleh F. Steps towards establishing a new medical college in the Kingdom of Saudi Arabia: an insight into medical education in the Kingdom. Bio Med Central Medical Educ. 2015; 15(1): 85.
- Mirza H, Arif M, Daud S, Rehman A, Munawar A, Ahmed A. Fourth year MBBS student's perception on Objective Structured Practical Examination (OSPE) in Community Medicine. Pak J Surg 2018; 34(3): 224-8.
- 11. Qureshi GS, Parveen S, Yasmeen T. Objective Structured Practical Examination (Ospe): An Experience At Dow University Of Health Sciences (Duhs) Karachi. Medical Channel. 2012; 18(1).
- 12. Manzar B, Manzar N. To determine the level of satisfaction among medical students of a public sector medical university regarding their academic activities. Bio Med Central Res Notes. 2011; 4 (1): 380.
- 13. Wadde SK, Deshpande RH, Madole MB, Pathan FJ. Research Article Assessment of III MBBS Students using OSPE/OSCE in Community Medicine: Teachers' and Students' Perceptions. Scholars J Applied Med Sci, 2013; 1(4): 348-353.
- 14. Rana IN. Evaluation of undergraduate teaching methodologies. J Rawalpindi Med College 2012; 16(2): 177-9.
- 15. Sarikaya O, Kalaca S, Yeğen BÇ, Cali S. The impact of a faculty development program: an evaluation based on the selfassessment of medical educators from preclinical and clinical disciplines. Advances in Physiol Educ 2010; 34(2): 35-40.
- 16. Nor MZ. Developing a preliminary questionnaire for the faculty development program needs of medical teachers using the Delphi technique. J Taibah University Med Sci 2019; 14(6): 495. https://doi.org/10.1016/j.jtumed.2019.09.007
- Reddy KR. Challenges in conducting an MBBS program in a Nepalese Medical College. J Gandaki Medical College-Nepal. 2017; 10(1): 49-56. <u>https://doi.org/10.3126/jgmcn.v10i1.17916</u>
- Mosaddek AS, Nargis W, Ahamed BU, Begum MF, Ara S, Rahman MF, et al. Evaluation of the Impact of Revised MBBS Curriculum: View of Intern Doctors. J Shaheed Suhrawardy Med Coll 2014; 6(1): 3-6. <u>https://doi.org/10.3329/jssmc.v6i1.31479</u>
- Humayun A, Khan HA, Anwar MI, Omair A, Mahmud TH, Ehsan N, et al. Impact of structured training on medical students' performance in objectively structured performance evaluation in community medicine clerkship. J Contemporary Medical Educ 2014; 2(2): 103.
  - https://doi.org/10.5455/jcme.20140625073700
- Abdelkreem E, Abo-Kresha SA, Ahmed EA, Ibrahim D, Hemdan SB, Abdellah MA. Needs assessment for faculty development at an Egyptian medical school: a triangulation approach. Int J Comm Med Public Health. 2020; 7(5): 1669.DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20201965

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