OSPE (Objective structured practical examination): Perception of the faculty and students at A Public Sector Medical College in Pakistan.

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ABSTRACT... Objective: Objective Structured Practical Examination (OSPE) is a growing way of assessing the students of medical universities particularly. This study is targeted to compare and assess different perceptions of the faculty and the students towards OSPE at a public sector medical college. Study Design: Cross Sectional Survey. Setting: Sahiwal Medical College Sahiwal. Period: 1st July 2020 to 15th July 2020. Material & Methods: The questionnaire was sent to all the participants by Whatsapp because of COVID-19 pandemic. All the undergrad students of MBBS (500) and all the faculty members (65) of clinical and basic medical sciences were included in the study. Results: The response rate of faculty members was 78.46% and that of undergraduate students was 70.80%. Out of 51 members who responded, 23 (45.10%) were males while 28 (54.90%) were female. Female students were having majority of participation (71.20%). Most of the faculty and students agreed with the fact that ‘The questions asked in the OSPE stations were appropriate and related to the curriculum’ (60.10% and 45.10% respectively). Response to a question ‘OSPE is more transparent, fair and objective as compared to traditional practical examination’ got a nod from faculty members (49%). Almost 76% of the students (strongly agreed and agreed) thought that OSPE was tiring and stressful for them but their respected faculty members thought the opposite. Conclusion: Our study concludes that there is satisfaction of both students and the faculty regarding their perceptions of OSPE at public sector medical college. In our study while comparing, the majority of both the groups were having almost same opinions.

Key words: COVID-19, Faculty, MBBS, Objective Structured Practical Examination (OSPE).

INTRODUCTION
In the field of health, the idea of a globalized world necessitates that all specialists, immaterial of their country, need to have the ideal assessment inside an asset obliged condition.¹ Given that ground real factors require the two premises to be brought into understanding, there is a solid necessity for foundations to create educational programs and their method of guidance in a way that is proof-based. Cullen et al.² depicted organized assessment as “evaluation of a specialist through methodically evolved training program.” Although they utilized this definition to portray assessment in a modern set-up, this definition can be adept in clinical instruction also. They further point out that, contrasted and unstructured evaluation, this procedure can be marginally increasingly expensive, and requires more exertion and labor from the workforce.³ The onus on the clinical instruction analyst, at that point, is to evaluate if there are advantages to organized assessment over unstructured assessment. Gagné’s work distributed in 1985 on intentional learning found that projects coming up short on the inspiring of information are poor and deficient if the information isn’t evoked from members.⁴ Organized evaluation effectively is an incredible technique for conveying and drawing data from students.⁵ It supports self-coordinated learning, energizes dynamic investment, and is destined to create great specialists.⁶
For the motivations behind this article, the standard assessment system comprising of Viva Voce was viewed as unstructured. The explanation is that this procedure lessens the job of the student as shareholders in their learning procedure. The procedure isn’t as thoroughly organized as an evaluation program. The standard assessment procedure is commonly viewed as wasteful with one article reasoning that instructional assessment is “not viable in changing doctor execution,” and flops in delivering the impartial outcomes.\textsuperscript{7} In the field of medical education, various researches have been led on the advantages of organized evaluation in essential sciences and in clinical or surgical fields.\textsuperscript{8-10} Organized assessment has been seen as advantageous in the improvement of insight, psychomotor abilities, and impact of students, superfluous of which field they taking the assessment in, and their range of abilities. It has been found to improve the clinical abilities\textsuperscript{8}, information\textsuperscript{9}, and demeanor\textsuperscript{10} in various clusters of students. So as a result of previously mentioned reasons the University of Health Sciences, Lahore began the Objective Structured Practical Examination (OSPE) in 2007 at different Medical Colleges in Punjab.

Acknowledgment of the requirement for offering significance to an organized evaluation in clinical sciences makes the premise of the applied system for this research, foreseeing that there will be a huge effect of the organized assessment on both the exhibition of clinical students in various subjects and furthermore teacher’s method of surveying the students. The aim of the study was to compare the perceptions of students and the faculty members to the objectively structured performance evaluation (OSPE) at Public sector medical college in Pakistan.

MATERIAL & METHODS
The survey is cross-sectional and done with the help of web based questionnaire. The survey was conducted at Sahiwal Medical College Sahiwal by Medical education department from 1\textsuperscript{st} July 2020 to 15th July 2020. The study was approved by institutional ethical committee (104/DME/SLMC/SWL).

Undergraduate students of MBBS were included in study while those with graduate or post-graduate status were excluded. Similarly faculty members were also included in the study and paramedical staff was excluded. Informed consent was taken from all the participants of the study beforehand. The questionnaire was made by using Google docs and then sent to all the participants by Whatsapp. Hand on submission of questionnaire was not done because of COVID-19 pandemic. All the students of 1\textsuperscript{st} year, 2\textsuperscript{nd} year, 3\textsuperscript{rd} year, 4\textsuperscript{th} year, final year and all the faculty members of clinical and basic medical sciences MBBS were sent the questionnaire. The questionnaire comprised of close ended questions whose answers were to be given on a Likert scale of five. The participants had to choose among options of ‘strongly agreed, agreed, neutral, disagreed and strongly disagreed’.

SPSS-version 24 was used to measure frequencies of different demographic characteristics of both groups along with their responses of different questions were also assessed by using frequency statistics.

RESULTS
The response rate of faculty members was 78.46%. As far as the demographic characteristics of the faculty members of Sahiwal Medical College is concerned, out of 51 who responded, 23 (45,10%) were males while 28 (54.90%) were females. Majority of the faculty members were from age groups 31-40 (45.10%) and 41-50 (27.50%). The faculty members of basic medical sciences responded more (58.80%) to questionnaire than those of clinical sciences (41.20%). Almost 71% of the faculty members of Sahiwal Medical College Sahiwal were having post-graduation degrees as well (Table-I).

The response rate of undergraduate students of Sahiwal Medical College Sahiwal was also 70.80%. Out of 354 students who responded to the questionnaire, female students were having majority of participation (71.20%) than the males (28.80%). Out of all the classes of MBBS at Sahiwal Medical College Sahiwal, Final year students participated in the survey with 31.10%, 4\textsuperscript{th} year
students’ participation frequency was 19.80%, 3rd year with frequency participation of 15.30%, 2nd year with 18.10% and 1st year’s participation frequency in the survey was 15.80% (Table-II).

We also calculated and compared percentages of different responses of the students and faculty to the questions asked in the questionnaire. Both the groups responded on a scale of five from ‘strongly agreed, agreed, neutral, disagreed and strongly disagreed’. In Table-III different percentages of the answers by the students and the faculty are given.

Most of the faculty and students agreed with the fact that ‘The questions asked in the OSPE stations were appropriate and related to the curriculum’ (60.10% and 45.10% respectively). Response to a question ‘OSPE is more transparent, fair and objective as compared to traditional practical examination’ got a nod from faculty members (49%) but the response to this question by the students found them both agreed (39.30%) and neutral (30.30%) as well. ‘Is OSPE easier to pass as compared to other assessment tools’ found 36.50% of the students in agreement and 20.20% in disagreement while 60.80% of the faculty members strongly agreed to this. Majority of the students (53.40%) and faculty members (43.10%) agreed with the fact that ‘OSPE is very useful and relevant to develop the psychomotor skills of students’. There was an overwhelming agreement of students (59.60%) and staff (49%) with agreement on the point that ‘Students are well briefed about the nature of OSPE examination’. In a response to a question stated,’ OSPE reduces the chance of bias by examiners’, 33.70% of the students agreed but the same number of students (33.70%) were also neutral in answering the above mentioned question and even 19.70% showed disagreement to this as well, hence there was mixed response from the students. While 41.20% of the faculty members strongly agreed and 47.10% agreed to this fact.

It was interesting to see the response of the students and the teachers to a question stating that ‘OSPE is lengthy and stressful for students’. Almost 76% of the students (strongly agreed and agreed) thought that OSPE was tiring and stressful for them but their respected faculty members thought the opposite as nearly 70% of them (disagreed and strongly disagreed) were of the opinion that OSPE was not that much stressful for the students.

| Variable               | n (%)    |
|------------------------|----------|
| Gender                 |          |
| Male                   | 23 (45.10) |
| Female                 | 28 (54.90) |
| Age                    |          |
| 20-30                  | 10 (19.60) |
| 31-40                  | 23 (45.10) |
| 41-50                  | 14 (27.50) |
| 51-60                  | 4 (7.80)  |
| Department             |          |
| Basic                  | 30 (58.80) |
| Clinical               | 21 (41.20) |
| Post-Graduation        |          |
| Yes                    | 36 (70.60) |
| No                     | 15 (29.40) |

Table-I. Demographic characteristics of faculty (n=51).

| Variable                 | n (%)    |
|--------------------------|----------|
| Gender                   |          |
| Male                     | 102 (28.80) |
| Female                   | 252 (71.20) |
| Academic Career          |          |
| (MBBS)                   |          |
| 1st Year                 | 56 (15.80) |
| 2nd Year                 | 64 (18.10) |
| 3rd Year                 | 54 (15.30) |
| 4th Year                 | 70 (19.80) |
| Final Year               | 110 (31.10) |

Table-II. Demographic characteristics of Students (n=354).

DISCUSSION

The response rates of our study for both students and teachers were fair (70.80% for students and 78.40% for teachers) so making our study a valid one. Among students most participants were females while among faculty the case was the same as the participation was relatively more from females which is similar to a previous study. Most of the faculty members were having post-graduation degrees too which is also similar to a study done in the past.

Our study found out that the responses of the students and the teachers were quite similar when compared to each other for almost all the questions.
For most part of the questionnaire of our study it was found out that the faculty members and the students agreed with the notions of ‘The questions asked in the OSPE stations were appropriate and related to the curriculum’, ‘OSPE is more transparent, fair and objective as compared to traditional practical examination’, Is OSPE easier to pass as compared to other assessment tools’, OSPE is very useful and relevant to develop the psychomotor skills of students’ and ‘Students are well briefed about the nature of OSPE examination’. A previous study found similar results as far as the response of the faculty is concerned but they contradicted us with the response of the students.13 Another study conducted previously found that teachers felt the requirement of collective efforts while turning to conduction of OSPE.14 In a previous study conducted, the mean score for the question ‘OSPE is more transparent, fair and objective as compared to traditional practical examination’ was highest of all at 3.99 with S.D of 5.83915, though we did not calculate mean but it shows the agreement as was found in our study.

In answering the other question, our study found out that the faculty members and the students of Sahiwal Medical College Sahiwal were of different opinions to the question of ‘OSPE reduces the chance of bias by examiners’. As students were both agreed and neutral on this agenda while teachers agreed to it with a good majority. A previous study contradicted with our results. Students did agree to these facts in that study because they thought that traditional examination methods are more examiner-centered and biased.16 The answer to the question of ‘OSPE is lengthy and stressful for students’ found the students and the faculty on opposite poles as majority of the students agreed with it while the respected faculty disagreed with it. Two of the previous studies also found the similar results in which the faculty

### Table-III. Responses of students and faculty to different questions.

| Questions | Students' responses | Teachers' responses |
|-----------|---------------------|---------------------|
|           | Strongly Agreed     | Agreed              | Neutral | Disagreed | Strongly Disagreed | Agreed | Neutral | Disagreed | Strongly Disagreed |
| OSPE is lengthy and stressful for students | 38.20% | 37.10% | 20.20% | 4.4% | 0.1% | 13.70% | 2 % | 13.70% | 60.80% | 9.80% |
| The questions asked in the OSPE stations were appropriate and related to the curriculum | 10.10% | 60.10% | 22.50% | 6.20% | 1.10% | 33.30% | 45.10% | 2% | 17.60% | 3% |
| OSPE is more transparent, fair and objective as compared to traditional practical examination | 9.60% | 39.30% | 30.30% | 15.70% | 5.10% | 21.60% | 49% | 19.60% | 7.80% | 2.60% |
| Is OSPE easier to pass as compared to other assessment tools | 8.40% | 36.50% | 27.50% | 20.2% | 7.30% | 60.80% | 29.40% | 2% | 2% | 5.90% |
| OSPE is very useful and relevant to develop the psychomotor skills of students | 13.50% | 53.40% | 20.80% | 9% | 3.40% | 33.30% | 43.10% | 19.60% | 2% | 4% |
| Students are well briefed about the nature of OSPE examination | 6.2% | 59.60% | 20.20% | 11.20% | 2.8% | 35.30% | 49% | 3.90% | 2% | 9.80% |
| OSPE reduces the chance of bias by examiners | 10.10% | 33.70% | 33.70% | 19.70% | 2.80% | 41.20% | 47.10% | 2% | 7.80% | 1.90% |
disagreed that the OSPE is tiring though they did not take this survey from the students.\textsuperscript{17,18}

It can also be attributed to the fact that there are lesser sessions arranged between students and their teachers at their respective medical colleges. Such sessions can make both the groups understand each other’s point of views so that a consensus can be developed in future related to improvement of OSPE.

CONCLUSION

Our study concludes that there is satisfaction of both students and the faculty regarding their perceptions of OSPE at public sector medical college. In our study while comparing, the majority of both the groups were having almost same opinions related to conduction of OSPE and also related to its implications. A collaborated effort is needed in future to improve the outcome of assessing the students during examination.

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