

Video-Assisted Feedback for Quality Improvement of the Third Year Medical Student OSCE



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Objective

-Evaluate the effectiveness of an interactive physical exam and video-assisted feedback in improving the perceived value of the third-year medical student pediatric clerkship Objective Structured Clinical Exam (OSCE).

Background

-The Objective Structured Clinical Exam (OSCE) is used by medical schools to evaluate and provide feedback on a student's clinical skills.

-Student feedback demonstrates favorable and beneficial experience.¹

-OSCE scores have been shown to be accurate predictors of future performance on national standardized exams.²

-Surgical OSCE demonstrate that implementing video-assisted feedback enhanced the experience.³

Methods

-Subjects: Third-year medical students on pediatric clerkship

-OSCE: Presented with common pediatric clinical scenario in the simulation center using standardized patients portraying a parent. Medical students then:

- Obtained a history of present illness and pertinent medical history
- Presented to a resident physician
- Cardiopulmonary physical exam on mannequin

-Intervention: During the second rotation an iPad with a video recording of the encounter was used by the residents to give students video-assisted feedback on their performance.

-Measures: Students filled out a survey in REDCAP regarding the OSCE. Results were analyzed between each group of rotating students.

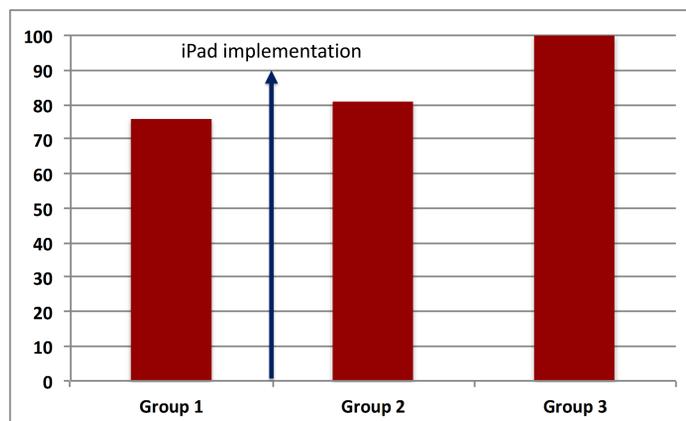


Figure 1. Percentage of students in each group who answered "yes" to the question, "Are you able to apply the feedback from the OSCE to the remainder of your clerkship rotations?" The blue line represents when use of video-assisted feedback via iPad was implemented.

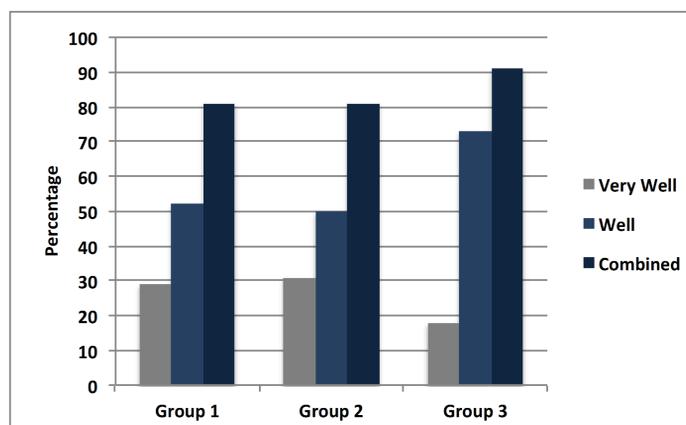


Figure 2. Percentage of students in each group who responded "very well", "well", and combined "very well" and "well" to the question, "Overall, how well did the pediatrics OSCE imitate clinical pediatric experience?"

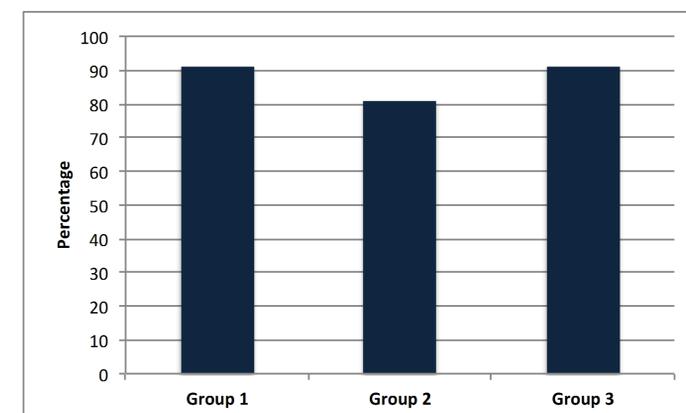


Figure 3. Percentage of students in each group who responded "yes" to the question, "Should the OSCE be offered to future classes?"

Results

-Three groups with 21, 16, and 11 students completed the survey.

-Students reported increased ability to apply feedback from the pediatric OSCE to performance on future rotations (Figure 1).

-The majority of students:

-Felt the OSCE accurately imitated their clinical pediatric experience (Figure 2).

-Would recommend continuing to offer the OSCE (Figure 3).

Conclusions

-OSCEs remain an integral component of medical student education and can be enhanced by incorporating video-assisted feedback in a general pediatric clerkship.

-Video-assisted feedback may promote learning in OSCEs – and therefore clinical applicability – by increasing direct-contact educational time with pediatric resident.

-Video-assisted feedback may enhance feedback by offering objective data for student education and reflection. Additional feedback by resident physicians is supportive and may be perceived as less subjective when utilizing objective video.

-Study is limited by small sample size. Additionally each OSCE had different pediatric resident physicians as evaluators, which may have altered type and amount of feedback given.

-Video-assisted OSCE feedback increased student's perception of clinical applicability; however, additional study is needed to demonstrate video-assisted feedback increases performance on national standardized exams.

References

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