To establish inter-rater reliability of two patient-centered communication rubrics used during objective structured clinical examinations (OSCEs) in a Patient-Centered Communication (PCC) course taught in the first professional year of a PharmD program.

**BACKGROUND**

- Throughout our curriculum, students are evaluated on their ability to effectively communicate in pharmacist-patient interactions.
- Students are evaluated through OSCEs. These simulated interactions with standardized patients (SPs), actors trained to play the role of a patient are conducted in simulated patient exam and counseling rooms in the University's Center for Advancing Professional Excellence (CAPE). The SPs are trained and employed through the CAPE center.
- Our SOP communication rubric template was developed for use across the curriculum through a rigorous process that established content, construct, and face validity.
- The rubric template was adapted for patient communication OSCEs, including two evaluations in the first professional year Patient-Centered Communication course: "Taking a Medical History" and "Counseling on a Self-Care Product".
- For both evaluations, the student has 10 minutes to complete the interaction with the SP, then the SP has 5 minutes to complete the evaluation rubric.
- The SPs are trained on the rubric and the interactions are video recorded for quality assurance, however the inter-rater reliability of the rubric had not been established.

**METHODS**

- Student videos from 2 evaluations in Fall 2013 PCC course were randomly selected from quartiles based on performance:
  - 12 videos (n=3 videos/quartile) from "Taking a Medical History" evaluation
  - 12 videos (n=3 videos/quartile) from "Counseling on a Self-Care Product" evaluation
- All videos were viewed & scored by the same 11 evaluators using the appropriate evaluation rubrics.
- Evaluators were categorized into 3 groups: faculty (n=3), trained SPs (n=4), and untrained SPs (n=4).
- All evaluators were oriented to the process and the case scenario. Trained SPs attended an additional hour-long training and rubric norming session led by the study PI who is also a course director.
- Each evaluator watched the videos on a computer in a private room.
- After watching each video, the evaluator had 5 minutes to complete the grading rubric. The evaluator was not allowed to complete any portion of the rubric until the video was completed and evaluators could not re-watch any portion of the video.
- Intra-class correlation coefficients (ICCs) were calculated to determine inter-rater reliability for all evaluators and within each evaluator group.

**RESULTS**

- ICCs across the 12 "Taking a Medical History" videos ranged from 0.57 to 0.88 for all evaluators, 0.44 to 0.85 for trained SPs, 0.53 to 0.88 for untrained SPs, and 0.48 to 0.94 for faculty, indicating excellent inter-rater reliability of the rubric.
- ICCs across the 12 "Counseling on a Self-Care Product" videos ranged from 0.86 to 0.98 for all evaluators, 0.87 to 0.98 for trained SPs, 0.82 to 1.00 for untrained SPs, and 0.80 to 0.99 for faculty, indicating excellent inter-rater reliability of the rubric.
- For both rubrics, there were no clear differences in inter-rater reliability between trained SPs, untrained SPs, and faculty evaluators.
- For both rubrics, inter-rater reliability was maintained across all student performance levels.

**IMPLICATIONS**

- Our Doctor of Pharmacy Program has successfully established the validity and inter-rater reliability of the two patient-centered communication rubrics to evaluate taking a medical history and counseling on a self-care product.
- Inter-rater reliability was established with both faculty and non-faculty evaluators; including both trained and untrained SPs.
- Inter-rater reliability was established for a range of learner performance levels.
- Inter-rater reliability appeared stronger with the "Counseling on a Self-Care Product" rubric compared to the "Taking a Medical History" rubric. This may be due to the increased subjectivity and variability in gathering information from a patient compared to providing information to a patient.
- The communication rubrics could be easily transferred to other schools of pharmacy or other health science programs. The rubrics can be completed by a variety of evaluators in a reasonable 5-minute time frame.
- All evaluators in this study had participated in SOP OSCEs in the past and were familiar with communication-based rubrics used in the SOP evaluations. Therefore, if adopted in other institutions, evaluator training and rubric norming sessions are recommended.

**REFERENCES**

1. Morrissey S, Ruben RB, James S. Speaking and listening competence for college graduates: basic and advanced skills. Available at: https://www.naccr.org/uploadedFiles/Teaching_and_Learning/Assessment_Resources/PDF_Speaking_and_Listening_Competencies_for_College_Graduates.pdf

**OBJECTIVES**

- To establish inter-rater reliability of two patient-centered communication rubrics used during objective structured clinical examinations (OSCEs) in a Patient-Centered Communication (PCC) course taught in the first professional year of a PharmD program.
- The SPs are trained on the rubric and the inter-rater reliability of the rubric.
- The rubric template was adapted for patient communication OSCEs and is used in the SOP Communications course.
- Establishing the Inter-Rater Reliability of Two Patient-Centered Communication Evaluation Rubrics

**METHODS**

- All videos were viewed & scored by the same 11 evaluators using the appropriate evaluation rubrics.
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