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The Abstracts were Selected in a Competitive Review Process from Among All the Abstracts to be Presented

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Using Gynecologic Teaching Associates to Measure Competency in Breast and Pelvic Examination Skills as a Part of a Longitudinal Curricular Study

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BACKGROUND: There is no published literature or national standard regarding the timing/placement of training in pelvic and breast examination (BPE) skills in the medical school curriculum. The primary objective of this Association of Professors of Gynecology and Obstetrics (APGO) funded study was to determine the effect of additional gynecological teaching associate (GTA) teaching on the BPE skills of medical students.

METHODS: All three groups received standardized skills training on BPEs adapted from Tulane University School of Medicine by the same cadre of GTAs. The frequency and timing of the training varied by graduating class: 2008, one session during year 3; 2009, one session during year 2 and another during year 3; and 2010, one session during year 2. All students' BPEs were assessed by the same GTAs at the end of the third year as part of a comprehensive clinical practice examination (CPE) using an identical Objective Structured Clinical Examination (OSCE) checklist that assessed 10 breast examination items and 10 pelvic examination items.

RESULTS: More class of 2009 students had experience performing breast examinations before the start of OBGYN (41/140 versus 33/145 for 2008), and there was no difference in pelvic examination experience among the classes ($n = 22$). Performance on the BPE station of the CPE varied by class: 2008 ($n = 128$, $M = 70.55$, $SD = 12.61$); 2009 ($n = 129$, $M = 77.05$, $SD = 12.35$); and 2010 ($n = 152$, $M = 67.60$, $SD = 13.79$).

CONCLUSIONS: Students with earlier training did not perform significantly more examinations before starting their OBGYN clerkship. Students who had two BPE training sessions outperformed those who had one session on the BPE skills station of the CPE. The results of this study support the benefit of repeated and timely GTA training on BPE skills of medical students.

COI DISCLOSURE: The authors report no conflicts of interest related to this work.

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Standardized Patient and Faculty Feedback: Are We All on the Same Page?

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BACKGROUND: Feedback is important to student development and an important supplement to self-assessment.^{1,2} Some programs use standardized patients (SPs) as the sole providers of feedback, others use faculty as the sole providers of feedback, and in some programs both faculty and SPs provide student feedback on the same encounters. This quality assurance project was designed to analyze faculty and SP feedback on the same encounters in a formative assessment of second year medical students. We sought to identify and categorize the similarities and differences and to assess how often the feedback was concordant (conveying similar observations), discrepant (conveying conflicting observations), and complementary (addressing different behaviors). This information may provide direction for SP training and faculty development to provide students the most helpful feedback in this setting.

METHODS: Feedback on 40 encounters from a formative three-station clinical skills assessment for 80 second year medical students was studied. Each student saw three of four possible cases (two focused history and physical examination on a musculoskeletal complaint and two history and review of systems for vague presenting complaint). Students received feedback from each SP immediately after the encounter, which was recorded on video. Faculty preceptors viewed the encounters through monitor and provided written feedback. Retrospective qualitative analysis was performed of written feedback to students by faculty and of video recordings of SPs' verbal feedback to students. Feedback content was classified as complementary or overlapping. Overlapping items were analyzed for the degree of concordance and discordance. The authors independently analyzed 10 encounters to ensure acceptable interrater reliability; the other 30 encounters were each analyzed by one of the authors.

RESULTS: In this project, of the total 809 items of feedback analyzed, 87% of the items were complementary and 13% overlapping. Of the overlapping items, 88% were concordant, and 12% were discordant. Discordant items represented less than 1.5% of the total items analyzed. The interrater agreement was 78% for identification of feedback items. Of those on which there was agreement, there was 97% accuracy of the classification as complementary, concordant, or discordant.

CONCLUSIONS: Our findings suggest that, when feasible, it is worthwhile having both faculty and SP feedback on the same encounter with little risk of conflicting messages that might confuse the student and/or devalue the SP feedback. Further study from a more diverse sample of programs and institutions is needed to demonstrate generalizability of these findings.

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A Content Validity and Generalizability Study of the "Quality of Standardized Patient Feedback Form"

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BACKGROUND: The provision of feedback has a profound effect on students' performance. In Switzerland, standardized patients (SP) are employed to train communication skills in nursing education. After a simulated clinical encounter (SCE), the SP directly offers oral feedback to the student. To ensure the student receives SP feedback of optimal quality, it is crucial that SPs receive appropriate feedback on their performance from faculty or SP trainers.¹ However, measuring the quality of SP feedback requires validated and reliable instruments.

The purpose of this study was to validate the previously developed measurement instrument Quality of Simulated Patient Feedback Form (QSF),² which assesses the quality of the immediate oral SP feedback after an encounter, since there is not much experience with QSF yet and no experience in German speaking countries with a translated version. With permission of the authors, we undertook a study to validate the translated QSF instrument at our institution.

METHODS: Because the QSF existed in English only, forward-backward translation to German was completed at the beginning of the study.³ To estimate content validity and reliability of the translated version two different studies were conducted:

1. Content validity (classical test theory): Expert ratings to estimate the content validity of the QSF items in the translated setting. A total of 25 SP experts from German speaking countries were asked to rate the importance of each of the QSF items by rating on a four-point Likert-type scale, from unimportant to important. The tool Survey Monkey was used to develop an online survey to be deployed through internet.
2. Generalizability: Six SPs experienced in giving oral feedback were filmed during SCEs with eight different students each. From these 6 × 8 recorded feedback sessions, six were randomly selected for the analysis. Ten faculty watched and rated the feedback provided after each of these six SCEs, judging quality on each of the QSFs 18 items on a five-point Likert scale ranging from "SP has fulfilled criteria" to "SP has not fulfilled criteria." Three weeks later, the procedure was repeated with the same 10 faculty and the same six SCEs. Thus, the data are organized as a fully crossed design of 6 SCEs × 18 items × 10 raters × 2 occasions. As the QSF is a finished and published instrument, we decided not to use items as a facet in our G-study but to use a total score over the 18 items as our dependent variable. The computations were done using GENOVA (JE Crick and RL Brennan, American College Testing Program, 1983), investigating the rated quality of feedback in SCEs with the error-producing facets of raters and occasions.⁴

RESULTS

1. Content validity: 60.8% of the importance ratings of the QSF items were on the highest point of the four-point scale. The interrater agreement for importance ratings, expressed as Cronbach's α , was $\alpha = 0.77$.
2. Generalizability/reliability: Generalizing more than 10 raters and two occasions, the G-coefficient for the QSF ratings reached 0.97. Using 10 raters in practice is rather unrealistic; we used so large a number in the G-study to safely estimate the variance components. A more realistic design would be one person rating feedback on one occasion; a D-study with this design produced a G-coefficient of 0.685. As the raters with their subjective ratings had introduced substantial error variance, it might be worthwhile to use more than one rater. Using two raters increases the G-coefficient from 0.685 to 0.81. The variance component for repetition of the ratings was so small that more than one rating would be superfluous.

CONCLUSION: The QSF was shown to have acceptable content validity and reliability, providing evidence that it can assess quality of oral SP feedback in a valid and reliable way.

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Impact of an Optional Revisit on Students' Postencounter Documentation in a Clinical Skills Assessment

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BACKGROUND: For practical reasons, clinical skills assessments (CSA) are highly structured activities with prescribed time allotments for patient encounters and post-encounter notes. CSA participants also are typically restricted from reentering the patient room. Building on work by Blatt et al,¹ we added an optional patient revisit and post-encounter note revision period to our senior medical student CSA. The purpose of this study was to address how students would use this additional time and whether engaging in a revisit resulted in revision of the patient note.

METHODS: This study used our 2008 phase 2 CSA, a four-station standardized patient (SP)-based examination directly observed and scored by faculty. This assessment is administered to senior medical students whose performance on an earlier eight-station SP-based assessment was deemed unsatisfactory. During orientation, students were told that they may return to the patient room during the revisit period to obtain additional information or to counsel the patient and that additional time would be provided for post-encounter note revisions. Time allotments for all encounters in the phase 2 examination were modified to include the optional revisit and note revision period and were: initial SP encounter, 15 minutes; postencounter documentation, 10 minutes; revisit, 3 minutes; and note revision, 3 minutes. Encounters were video recorded, and revisit periods were reviewed for activity type [medical history (mi), physical examination (PE), counseling (C)]. A copy of the patient note was collected after the initial writing period and again after the revisit. Initial and follow-up notes were compared for content in each of the four sections: medical history, physical examination, differential diagnosis, and diagnostic evaluation. Analysis compared the content of the encounter activities and changes in note content.

RESULTS: Sixteen students participated in the examination, for a total of 64 patient encounters.

Students chose to revisit in 49 (76.5%) of the encounters. The content of these 49 student-patient revisit interactions included additional MI, 76%; additional PE, 35%; and patient counseling, 63%. Students modified (either added or deleted information from) their notes after 48 of the 49 revisits (98%). Of the students who obtained additional MI information, 89% modified the MI section of the note. Of students who performed additional PE maneuvers during the revisit, 93% modified the PE section of the note. Additionally, after a revisit, 49% of students modified their differential diagnosis and 55% modified their diagnostic plan.

CONCLUSIONS: Students frequently used the revisit opportunity during the CSA, with subsequent modification of their patient documentation. We feel that the revisit adds a dimension to the CSA that closely resembles clinical practice.

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COI DISCLOSURE: The authors report no conflicts of interest related to this work.