OSTE: The Objective Structured Teaching Exercise/Exam

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What is OSTE?
• First described in the early 1990s
• Training tool for both community-based preceptors and internal faculty
• “Standardized students” trained to portray specific skills, attitudes, and behaviors
• Faculty-student interactions “scored” based on scenario specific rubrics

Why OSTE?
• Reflect on your personal experiences receiving training for teaching skill development. What was emphasized?

• What about:
  – Professionalism lapses
  – Breaking bad news (e.g. course failure)
  – Providing constructive feedback
OSTE Examples in the Literature

- 2-8 encounters; 5-15 minute encounter duration
- Precepting skills
- Small group facilitation
- Problem based learning facilitation
- Professional behavior lapses
- Conflict resolution
- Most utilized video taping with self and/or peer review of videos with group discussion

Pilot OSTE at Maryland

- Two 10-minute cases:
  - Ambulatory care clinic: student has disorganized and timid approach to presenting patient
  - Student challenging an exam question
- Student volunteers from the professional program assisted with scenario and skills/communication checklist development
- Cases piloted by study faculty and fourth year teaching rotation students

Maryland Process

- APPE teaching rotation students served as standardized students
- Two-hour sessions conducted with range of 6-8 faculty and PGY-2 resident participants per session (14 participants total)
- Pre/post surveys administered
- Encounters digitally
- Researcher team watched and scored all encounters
- Participants self-reviewed and scored each encounter
- All (participants, researchers, and students) participated in a 40 minute debriefing session
The Case of “Pat Smart”

Pat Smart is a P2 student who has an appointment with you to discuss a challenge he/she has about question #2 on yesterday’s exam. You are a lecturer in this course and the author of the question being challenged. You have already reviewed the challenge and have denied it. Interact with the student as you ordinarily would. The exam question and the item analysis are available to you. The student is waiting for you in your office, and you are running 10 minutes late for the meeting.

Exam Item

LM is a 27 year old pregnant (2nd trimester) female who complains of frequent urination, urgency, and dysuria. On physical exam, the patient does not have flank tenderness or abdominal pain. Her temperature is 99.8, BP—112/64, RR 16, HR 72. The physician diagnoses LM with cystitis and writes a prescription for cephalexin 500mg. LM states that she is allergic to penicillin. As the pharmacist who will fill this prescription, which of the following is/are patient-related variable(s) that should be considered when making a decision about the appropriateness of this antibiotic?

I. Pregnancy
II. Severity of the infection
III. Penicillin allergy

a. I only
b. I and II only
c. II and III only
d. I, II, and III only*

Initial Written Challenge and Item Analysis

“This question is misleading. Cephalexin is not the drug of choice for cystitis... and most patients who are allergic to penicillin can take a cephalosporin.”
Video Example

Pat Smart’s Checklist

- Apologizes for running late
- Acknowledges that student is upset or concerned (makes empathetic verbal response)
- Demonstrates active listening skills such as eye contact, head nodding
- Remains calm / avoids escalation of emotions
- Avoids a condescending tone and belittling statements
- Provides explanation for decision based on evidence / facts available
- Offers a course of action following the encounter

Faculty/Resident Response

<table>
<thead>
<tr>
<th>Abbreviated Survey Item</th>
<th>Average</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
</tr>
<tr>
<td>I understand OSCE</td>
<td>2.93</td>
</tr>
<tr>
<td>I effectively use questions</td>
<td>3.21</td>
</tr>
<tr>
<td>I am confident in confrontational situations</td>
<td>2.86</td>
</tr>
<tr>
<td>The “actor” was an accurate portrayal</td>
<td>3.93</td>
</tr>
<tr>
<td>Case A was realistic</td>
<td>3.79</td>
</tr>
<tr>
<td>Case B was realistic</td>
<td>3.71</td>
</tr>
<tr>
<td>The debriefing allowed me to learn</td>
<td>3.03</td>
</tr>
<tr>
<td>I was comfortable during the debriefing</td>
<td>3.57</td>
</tr>
<tr>
<td>Session was well organized</td>
<td>3.63</td>
</tr>
<tr>
<td>OSTE is an effective approach</td>
<td>3.53</td>
</tr>
<tr>
<td>Would like to participate in future OSTE</td>
<td>3.79</td>
</tr>
</tbody>
</table>

4 = Completely agree; 3 = Generally agree; 2 = Generally Disagree; 1 = Completely disagree.
12 Tips for OSTE Success

1. Clarify the goal
2. Determine context and target audience
3. Identify teaching skill(s) to be addressed
4. Prepare the scenario
5. Develop the assessment tool
6. Choose the standardized learner
7. Train the standardized learner
8. Hold a “dry run”
9. Protect the teacher in the “hot seat”
10. Incorporate the OSTE into your context of faculty development
11. Promote buy-in
12. Evaluate the activity


OSTE Reference List