

CASE SCENARIO: CLINICAL REASONING

Daniel is a physical therapist resident, 3 months into his orthopaedic physical therapy residency program. Kira is Daniel's mentor. Their first new patient of the morning was Timothy, who is 57 years old and has been referred to the clinic by his orthopaedist with a diagnosis of severe osteoarthritis of his right knee and mild osteoarthritis of his left knee. Daniel's interview with Timothy revealed that his primary concern is that his bilateral knee pain is getting worse, and he has stiffness that limits his walking. He has experienced worsening of his symptoms gradually over the past two years, but he has had knee pain for the past 8 to 9 years. Timothy lives alone in an apartment with stairs up to the bedroom and is no longer going to a gym. He was a construction foreman for a large company for 27 years. His symptoms are minimally irritable and minimally severe. Timothy reported he has Type II diabetes, hypertension, and *"his doctor told him he is no longer just overweight, he is now officially obese."* He smokes a half a pack of cigarettes per day (down from 1.5) and drinks occasionally (socially). One year ago, he had his third steroid injection in his right knee. He stated that his goal for physical therapy is to *"stop my knees from getting worse and maybe get back to exercising if I can."*

At the conclusion of the interview, Daniel stepped outside of the treatment booth with Kira to discuss his thoughts on the case so far.

1. Which of the following would be the best thing for Kira to do next, to facilitate Daniel's clinical reasoning?
 - a. show Daniel her checklist to facilitate identification of what he had left out of the interview.
 - b. model for Daniel how she would have done the interview differently by stepping in for him.
 - c. ask Daniel to report on his interpretation of the case so far and how he has come to that conclusion.
 - d. answer any questions Daniel has as they discuss how he will conduct the physical examination.

Focused on one particular aspect of Daniel's clinical reasoning, Kira asked, *"How would you summarize Timothy's perspectives of his problem?"* Daniel responded that Timothy seems concerned that he is gaining weight and that he wants to reduce the pain in his knees so he can increase his activity again. He added that Timothy seemed motivated to improve his health, because he had reduced his smoking and was now going to physical therapy so that he could increase his activity.

Kira then asked, *"How did you determine if you really understand Timothy's perspective?"* Daniel paused, then acknowledged that he didn't really check in with Timothy specifically about that; it *"just seemed so obvious."* He didn't think he really needed to take the time to go over that again. Kira then asked Daniel to reflect on the session so far and consider if he may have made any of the clinical reasoning errors he had learned about in his residency program. Daniel thought for a moment, and then said with a groan, *"Oh...maybe I'd better go back in and clarify a few things before moving on with the physical exam."*

2. Which one of the following clinical reasoning errors was Daniel likely commit?
- a. premature anchoring.
 - b. commission bias.
 - c. superficial psychosocial assessment.
 - d. approaching narrative reasoning inductively.

Daniel spent more time with Timothy and asked him more about his thoughts, feelings, and concerns. Daniel learned that Timothy was sent to physical therapy after declining the total knee arthroplasty surgery his orthopaedist had recommended for his right knee. Timothy was concerned about taking time off of work to recover from surgery, since he had just started a new job 2 months ago and was still on probation. His increased pain and decreased ability to walk were starting to affect his ability to do his job. He could not afford to lose this job as he had been out of work for the past 3 years; he was laid off of his foreman job after 27 years. Timothy had not been able to afford a gym membership since he was laid off, and he had reduced his smoking because he could not afford to buy as many cigarettes. Timothy's physical therapy goals were actually focused on being able to keep his new job.

3. Which one of the following would be the best next step for Kira to take to facilitate Daniel's learning from this experience during their debriefing later that morning?
- a. teach Daniel how to integrate deductive questions into his patient interview routine.
 - b. ask Daniel to review the common clinical reasoning errors before their next mentoring session.
 - c. model for Daniel how he could have combined deductive and inductive questions more efficiently the first time through.
 - d. discuss Daniel's ideas for concrete strategies of how he could use what he learned to improve his clinical reasoning.

ANSWERS

1. The best answer is **c. ask Daniel to report on his interpretation of the case so far and how he has come to that conclusion.** To facilitate a learner's clinical reasoning "in action" during a patient encounter, it is important to really understand the thinking behind any actions observed in the moment. In this case, the approach will continue to keep Daniel in control of his clinical reasoning and decision-making and optimize opportunities for metacognition and self-reflection "in action." Also, by discussing both what Daniel is thinking and why, the mentor facilitates the identification of any gaps in his knowledge and/or skills that may need to be worked on later. Kira's intent in this situation is to challenge Daniel to critically reflect on his performance "in the moment," to see if he can accurately self-assess whether or not he has enough valid information to support the conclusions he has drawn so far. It is especially important to facilitate a learner in self-assessing whether or not he has sufficient rationale for his conclusions even when the mentor agrees with those conclusions. This way both the learner and the facilitator can verify that the conclusion was drawn based on a sound clinical reasoning process and was not a "lucky guess."
2. The best answer is **c. superficial psychosocial assessment.** Timothy didn't volunteer contextual detail in his responses to Daniel's largely closed-ended, deductive questions, leading Daniel to assume he had the full story. Daniel also did not follow up or clarify many of the details Timothy provided in order to develop an understanding of how Timothy might feel about or understand various aspects of his situation. Therefore, Daniel assumed that there were no significant personal factors of note that had to be considered in his clinical reasoning. The outcome was an inadequate and inaccurate understanding of the patient's story, based on assumptions and partial information.
3. The best answer is **d. discuss Daniel's ideas for concrete strategies of how he could use what he learned to improve his clinical reasoning.** Because Daniel was able to self-identify his error in reasoning (with some facilitation from his mentor) and was then successfully able to revisit his interview to gather data about psychosocial, personal factors relevant to develop a full understanding of Timothy as a "patient" and as a "person." Kira does not need to shift into teaching mode at this time. The best way to continue to empower Daniel to learn from his own experience is to first ask him to come up with concrete strategies to facilitate a change in how he will approach clinical reasoning through future patient interviews, prior to offering any suggestions.