LETTERS

The Art of Student Facilitation: Does Patient Counseling Technique have a Role?

To the Editor: In the last 5 years as a classroom instructor and clinical preceptor, I have been introspective about my clinical competency, my ability to simplify difficult concepts, and my overall ability to be approachable so that I can serve as a resource for my students. Like most teachers, I have made a conscientious effort to brush up on my knowledge prior to class in preparation for that one difficult question that will surely stump me. However, I unfortunately had not considered a systematic approach to answering student questions until recently.

For the last year and a half, I have used team-based learning (TBL) within my classroom with great success. The entire class is divided into teams of 6 to 7 students and the teams are responsible for working together to solve simple to complex problems. The instructor's role during this class is that of a facilitator. As a facilitator in the TBL environment, I have developed a fairly close professional relationship with most of my students and have had the opportunity to have one-on-one conversations with many students regarding concepts that they have difficulty comprehending. Last year, as a rookie TBL instructor, I had a conversation during an application exercise with student JG regarding a confusing therapeutic concept. Afterwards, I replayed that day's class in my mind to evaluate my classroom technique. It was at this time that I thought about my conversation with student JG and felt that something was lacking in my facilitation technique.

Outlined is the flow of that conversation:

Student JG: I do not understand why we need to add piperacillin/tazobactam to this patient's antibiotic regimen. I thought ampicillin/sulbactam would be appropriate, but my teammates say that it would not be an acceptable antibiotic choice.

Vyas: Team, what do you think?

Teammate: This patient needs coverage for *Pseudomonas a*. That is why piperacillin/tazobactam is the best choice and not ampicillin/sulbactam.

Vyas: Exactly! JG, does that make sense?

Student JG: Yes, I guess so.

Vyas: So why do you think this patient needs *Pseudomonas a* coverage?

Student JG: Because this is a patient who presents with contiguous osteomyelitis.

Vyas: What kind? With or without vascular insufficiency?

Student JG: Umm, without?

Teammates listen to the conversation. One student snickers slightly.

Vyas: Are you sure?

Student JG: No, I meant with vascular insufficiency.

Vyas: Yes! Remember the patient has a diabetic foot ulcer. This makes it contiguous osteomyelitis with vascular insufficiency. In this case, the patient is at risk for an infection caused by *Pseudomonas a*. Does that make sense?

Student JG: Yes, I think so.

Vyas: Ok, great! Please let me know if you have any other questions.

This was not an especially poor teacher-student encounter, but there was certainly room for improvement. Allow me to elaborate:

As an instructor in several professional communication skills courses, I have taught students the importance of using "open-ended" questions, the "teach back" method, and the use of a "closure" statement to ensure the patient understands everything that is being discussed. As I look back at my conversation with student JG, I realize that I had not used any of these concepts in my interaction with the student. Outlined below are the main problems with my encounter with this student:

- (1) My position as an instructor was intimidating enough without immediately involving JG's teammates into the conversation. This may have embarrassed JG and prevented him from reasoning through the application exercise.
- (2) I used several closed-ended questions such as "Does this make sense?" and "Are you sure?," etc.
- (3) I asked leading questions such as "What kind? With or without vascular insufficiency?" This did not allow me to truly elicit JG's understanding of the material.
- (4) Lastly, I did not use the "teach back" methodology to confirm JG's understanding of the concepts.

As I reflected on these mistakes, I felt that several of the same patient communication strategies can be translated into classroom teaching. Using key patient counseling concepts, consider the following exchange:

Student JG: I do not understand why we need to add piperacillin/tazobactam to this patient's antibiotic regimen. I thought ampicillin/sulbactam would be appropriate, but my teammates say that it would not be an acceptable antibiotic choice.

Vyas: Good question. Tell me how you are thinking through this problem. (Elicit what the student already knows).

Student JG: Well, blank blank!

Vyas: Team, you believe piperacillin/tazobactam is the best choice. Let us talk through it. How did you arrive at this answer? (Allows the students to reason through the problem rather than leading them to the right answer).

Teammate: This patient needs coverage for *Pseudomonas a*. That is why piperacillin/tazobactam is the best choice and not ampicillin/sulbactam.

Vyas: Ok, good! JG, what is your take on their reasoning? (Gives the student a chance to defend his own reasoning while eliciting his knowledge base).

Student JG: Blank blank.

Vyas: Ok, looks like we are on the right track. So let us take a step back. Why does this patient need *Pseudomonas a* coverage? (Allows for a step-by-step process for reasoning through this complex problem).

Student JG: Because this is a patient who presents with contiguous osteomyelitis.

Vyas: What further delineation of this osteomyelitis may help you work through empiric coverage for this infection? (Use of an open-ended question).

Student JG: Umm, osteomyelitis without vascular insufficiency?

Teammates listen to the conversation, one student snickers slightly.

Vyas: Why do you think it is osteomyelitis without vascular insufficiency? (Helps elicit the student's reasoning).

Student JG: The patient has diabetes, so it is osteomyelitis without vascular insufficiency.

Vyas: Ok, what does vascular insufficiency refer to? (Use of an open-ended question).

Student JG: Blank blank.

Vyas: Diabetics generally have reduced blood flow, especially to the lower extremities. This makes it contiguous osteomyelitis with vascular insufficiency. So based on this categorization, what pathogens should you cover empirically?

Student JG: blank blank.

Vyas: Ok, great! What other questions do you have for me? (Use of an open-ended question.)

Student JG: None. I think it makes sense.

Vyas: Ok, just so I have not missed any critical detail, tell me how you would work through this case. (Closure statement and use of teach back method.)

As a young academic, I learned an important lesson last year when I realized that no amount of clinical knowledge can replace the importance of communicating effectively with a student. As with a patient, a systematic approach can be a valuable tool in ensuring that the lines of communication are open and the student benefits from each encounter with his/her instructor. After this little incident, I have worked on developing my own systematic approach to facilitating student learning and I have learned one thing: it takes a concerted effort to be a good teacher!

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