Teaching Clinical Students to Teach

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An often-stated aphorism is that when we teach something to others, we gain a better grasp of it ourselves. By giving students the opportunity to be teachers early in their careers, they not only gain a better understanding of clinical content but also begin to develop teaching skills that will help them be effective physicians and clinical teachers in the future. In this article, we describe various ways that clinical students can teach others under the guidance of their office-based preceptor.

The Clinical Preceptor as Role Model

Although many clinical preceptors develop exceptional teaching skills, this occurs more often by accident than by design since most preceptors receive little training in teaching. We have opportunities to participate in a more organized training process for future physicians and clinical teachers by allowing students to be teachers early in their education and being teacher role models for them.

As clinical preceptors, we can begin the process of training students to be teachers by instilling basic principles and skills, by inspiring an interest in teaching, and by being excellent teachers ourselves. Students appreciate knowing what excites us about teaching. What is particularly fulfilling? What hurdles do we encounter? Similarly, asking students for feedback on our own teaching can make it clear to students that teaching is a work in progress, benefiting from continual modification. Students who learn from us that teaching requires active skill development are likely to work actively on the development of those skills for themselves.

Teaching Preclinical Students

Many office-based teachers precept both clinical and preclinical students. By pairing the preclinical student with the clinical student in the office, the preclinical student can practice his/her history and physical exam skills under the guidance of a more experienced student who often has more time than the preceptor for direct observation. At the same time, the clinical student has opportunity to emulate the clinical teaching of his/her preceptor by giving the preclinical student tips on performing the physical exam and correcting any improper exam techniques. The clinical student can also help the preclinical student understand the presenting clinical condition, starting with basic science principles that the preclinical student is familiar with and advancing the discussion to involve clinical principles. Many clinical students are struck by how validated they feel as they work together with a junior colleague, and they realize how much they’ve learned in only a few years. Similarly, preclinical students frequently report how inspired they are to realize that the student who is only a few years ahead of them has acquired so much experience and information.

Clinical students can also meet with a small group of preclinical students in the preceptor’s office to
hold “Student Rounds,” in which the clinical student presents a case and facilitates the discussion. By presenting a case (eg, a middle-aged woman with cough), the students discuss a differential diagnosis that includes bronchitis, asthma, pneumonia, and chronic obstructive pulmonary disease (COPD). This introduces preclinical students to a variety of clinical syndromes within one system. The clinical student can teach preclinical students how to use the stethoscope to listen to a patient’s lungs and also model a method of gathering data and clinical reasoning. Clinical students benefit from these discussions of common clinical problems, physical examination skills, anatomy, and physiology. They find these sessions a reassuring antidote for their perception that “There’s so much to learn—I feel like I don’t know anything!” Also, clinical students often report that they hadn’t realized where the gaps in their knowledge were until they prepared for a teaching session. Inevitably, students are surprised by how confident they feel about the material after reviewing and presenting it.

Teaching Clinical Student Colleagues

Some students have particular areas of interest and expertise, either because they have an advanced degree in another field or they have completed extra electives or readings in an area of interest (eg, dermatology or infectious disease). These students may have in-depth knowledge regarding a clinical problem that equals or surpasses that of the clinical preceptor. This is an opportunity for that student to present, for the benefit of both the clinical preceptor and other students in clinical, the current knowledge on a difficult or unusual topic.

Teaching Preceptors

Many clinical students enjoy researching questions that arise from a patient encounter and practicing skills in evidence-based medicine learned previously. The clinical student can research a question using on-line resources, obtain relevant articles and abstracts and discuss these with his/her preceptor, and help answer the question about a specific patient. This also provides a valuable model of the clinician as a perpetual student and helps the preceptor keep his/her knowledge base current.

Clinical students also can perform chart reviews of patients with clinical conditions such as diabetes. These chart reviews allow students to review current practice guidelines and then audit charts to compare how well the management of the patients matches those guidelines. Students can share the results of the chart audits with their preceptors and help the preceptor formulate plans to more effectively follow current guidelines. Students gain knowledge and confidence from such a detailed review, while making a substantial contribution to patient care.

Teaching Patients

Students often have more time than their preceptors to teach patients basic principles about their clinical condition. By teaching their patients, students enhance the physician-patient partnership and help patients adhere to treatment recommendations. For example, taking the time to teach a patient with asthma that inflammation is a central part of the pathophysiology of his/her illness may result in the patient having a new appreciation for the value of steroids and leukotriene inhibitors. Demonstration and instruction in using a peak flow meter helps patients bring more data to future clinic encounters, while also empowering the patient to become a partner in his/her own care.

Disease prevention and health maintenance are additional areas where students can make a substantial contribution to patient education. Discussions may include a review of recommended vaccinations, healthy lifestyle measures, or appropriate screening recommendations for a patient with familial risk factors for certain diseases.

Supporting patients who need help with behavior change is time consuming but also potentially rewarding. With some assistance, many students can play an invaluable role in the educating and counseling the patient. Coaching patients to change their behaviors, by initiating an exercise or smoking cessation program or changing their eating patterns, all provide rich opportunities for students and patients to develop satisfying and helpful therapeutic relationships.

Conclusions

By modeling the kind of teaching we would like to see in our students, and by giving them opportunities to try it themselves, students learn valuable lessons about teaching. Through our own behavior, we teach organization, clarity, and respect for our students. When we acknowledge our own areas of ignorance and model the use of reference material and/or consultations, we help our students understand that learning and teaching are lifelong pursuits.

There are a number of different opportunities that we can give students to teach. As we give them these opportunities, it is important to observe them teaching in these different situations, just as we must observe them conducting a physical examination. Direct observation offers a chance to give specific feedback about their teaching, with emphasis on areas of strength and areas for improvement. Giving them opportunities to teach and providing feedback to them on their teaching will go a long way in helping them develop the necessary teaching skills needed to be a good physician and effective clinical teacher in the future.

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