Peer Teaching in Medical Education

Peer teaching is a term that signifies the teaching of juniors by the more senior in the same undergraduate or postgraduate track. It provides an opportunity for students who are to become future physicians to provide leadership, coaching, and learning skills training as well as enhance confidence. It also allows them to practice multisource or peer feedback and assessment.

The formats in which peer teaching occur include teachers and learners who are in the same year up to and including those who are several years more senior in training than the learner. It also includes educational settings that are quite formal and are set in the established curriculum as well as less formal arrangements or those voluntary in nature. Groups range from one-on-one peer tutoring to teaching groups of various sizes. Among the reasons to practice peer teaching are

- to alleviate teaching pressure for faculty members
- to offer education to students on their own cognitive level (knowledge base is similar to the learner)
- to create a comfortable and safe educational environment
- to socialize with students in medical school and provide role models (e.g., counseling students who are peers; students who are more advanced can serve as powerful role models.)
- to offer students an alternative motivation as well as another method of studying (Students not only learn twice, they learn in a different way. It also appears to add to the teacher’s own knowledge.)
- to enhance intrinsic motivation in students (Students who act in a teaching role develop more motivation to study material than when they are in the role of being a regular student.)
- to prepare physicians for their future role as educators (There is a consensus by the medical community that doctors need to be educators.)
- to practice peer feedback as part of multisource feedback (Students should be trained to assess each other, and in clinical settings it is possible that this could lead to more valid and reliable assessment.)
- to teach leadership skills and instill confidence (Leadership is needed to organize teaching, and when residents teach courses, it appears to foster self confidence.)
- to modify the academic medical culture toward embracing education as a core task (Future studies may show an association between teaching and health care outcomes.)
- to sustain medical training programs in severely resource-constrained settings (Areas with low physician-to-population ratios threaten the capacity to train sufficient doctors.)
- to offer supervision responsibility to trainees in competency-based postgraduate programs (For example, residents in competency-based programs may supervise other residents once they have mastered a competency the residents they supervise do not have.)

(Cate OT and Durning S. “Peer Teaching in Medical Education: Twelve Reasons to Move from Theory to Practice.” Medical Teacher. 29: 591-599; 2007.)
Analyzing the Background of Medical School Deans

A study of the background of the deans of the 125 U.S. allopathic medical schools was conducted by the Life Sciences Practice of the firm Spencer Stuart. It included their educational background, certifications, previous positions, and duration of tenure.

Of the 100 deans who responded, it was learned the most common positions they previously held were department chair, center director, and associate/vice dean. Internal medicine was the most common specialty in which they had board certification. Less than 30 percent had additional advanced degrees, most commonly Ph.D., followed by an M.B.A. and M.P.H. On average, the age of the deans was reported to be 58.4, who served an average tenure of four years.

This short duration was attributed by at least one dean to “dean burnout” as a result of the job’s intensity, time commitment, and challenges. Comments by some of the incumbent deans included the statement that no one is quite prepared to be a dean. Because of the differences in each medical school, among the skill sets that deans may require are financial management ability, research experience, clinical experience to have credibility by the institution’s constituents, and advanced study in certain areas (e.g., management, public health, organizational behavior, negotiation, conflict resolution, technical skills, personal and people skills, and leadership aptitude).

Suggestions generated by the study for future deans include

- alleviate teaching pressure for faculty members
- develop and articulate a strategy
- acquire financial management skills
- continually enhance interpretation skills
- find a few people who can provide trusted counsel and advice
- network with other deans
- be as transparent as you can with faculty
- cultivate a strong relationship with the president or chancellor of the university and/or the board members to whom you report

(Falcone CM, Earle P, Isaacsam I, and Schlosser J. "Route to the Top: Deans at North America’s Academic Medical Schools." The Physician Executive. 58-62; November-December, 2007.)

Training Spanish-Speaking Foreign Medical Graduates

Courses preparing Spanish-speaking foreign medical graduates (FMG) are being offered at the University of California Los Angeles (UCLA) School of Medicine to prepare them for the U.S. Medical Licensing Examination (USMLE). In addition, those who are in this program are provided with a $22,000 stipend from UCLA derived from private foundations.

There are now 14 Latin American medical graduates in different stages of residency training in the UCLA program, which costs $44,000 for each who is enrolled. In addition to training to prepare them for the USMLE, they observe training at a UCLA-affiliated hospital as well as receive support in their application to obtain a residency program. Those finishing the program must complete three years in a medically underserved area, which may be in a city or rural community.

Many of those who are participating in the program had been in the United States working as X-ray technicians, nursing assistants, or health care volunteers. Only 4 percent of California’s physicians are Latino even though 33 percent of the population is Hispanic. In Texas, where 35 percent of the population is Hispanic, the University of Texas Health Sciences Center in San Antonio is considering a similar program.

Currently, Spanish is spoken by only 8 of the 27 family medicine residents at the UCLA affiliate called the Regional Medical Center in Moreno Valley, California, where two-thirds of the patients are Hispanic, including many who don’t speak English. It has been noted that this leads to poor communication that can cost millions of dollars annually. This is due to ordering unnecessary tests, inaccurate or delayed diagnoses, confusion about drug dosage and side effects, noncompliance, and a greater likelihood of not providing follow-up care.

More medical school graduates are being produced in Latin America than can be accommodated by their hospitals. For example, while 12,000 students complete medical school annually in Mexico, only 4,300 residency positions are available. UCLA dips into this oversupply. An interesting finding in this program is that the schedules for those physicians who speak Spanish are always full compared to those who can only communicate in English.

The Dilemma of Pursuing Graduate Medical Education and Starting a Family

In 1965, only about seven percent of medical students were women. This compares to about 50 percent in the class that entered in the 2005-2006 academic year. However, it is not realistic, as well as being inappropriate, for residency programs to expect physicians in graduate medical education to delay having children or to refrain from spending critical time with their infants.

It is recommended by physicians from both Harvard Medical School and its Massachusetts General Hospital, as well as from the University of Michigan Medical School, that this issue be addressed by including onsite child care for trainees in graduate medical education. Also suggested is extending federal reimbursement for graduate medical education to include paid family leave and increasing part-time training options.

They also make a plea for competent trainees being exempt from making up leave time. In addition to new mothers who are in graduate medical education programs, it is argued that it is unfair for hospitals to provide women with eight weeks of paid maternity leave while fathers who are in training programs may only be receiving two weeks. Today, most teaching hospitals provide family-leave policies that typically include pay.

It is important to note that in 1950, the percent of physicians in training who were mothers and who had their babies was only 24 percent compared to 42 percent in 1989. In the late 1980s and early 1990s, the American College of Physicians began to develop written policies on parental leave; in fact, the American Council on Graduate Medical Education now requires printed statements on such policies.

Using the Internet in Geriatrics Education

Medical students, interns, residents, fellows, and practicing physicians participated in a survey conducted by the Consortium of E-Learning in Geriatrics Instruction (CELGI). Of the 130 medical geriatric programs contacted, there were 68 (52.3 percent) that returned the surveys. Almost all were completed by the program or fellowship director. Six domains were included in the study, including program description (institution name, number and type of faculty, number and type of learners), Internet presence, current Internet-based teaching, training and evaluation, materials in development, and barriers.

Of the 68 responders, 56 (or 82 percent) had an Internet presence through a Web site, which was mainly to provide information about the program. In addition, 57 (or 84 percent) used email to communicate between learners and teachers. Also reported was the use of a listserv by 17 (or 25 percent), while 5 (or 7 percent) used discussion boards in communication. Fifty-four (or 79 percent) used the Internet for geriatric education, including course or clerkship materials and learner/teacher evaluation. Of these, 29 (or 54 percent) reported instructors’ acceptability, and 28 (or 52 percent) reported moderate-to-high levels of acceptability. These 54 programs were funded by the local institution (39 percent), private foundations (21 percent), and federal funds (9 percent).

Also, more than half used the Internet for course or clerkship administration, and more than 60 percent for content. Barriers included lack of human and material resources (41 percent), lack of faculty interest (12 percent), and lack of institutional support (12 percent). The most common topics reported by the program were dementia (6), falls (5), delirium (3), geriatric assessment (3), and attitudes about aging (3).

(Hajjar IM, Ruiz JG, Teasdale TA, and Mintzer MJ. “The Use of the Internet in Geriatrics Education: Results of a National Survey of Medical Geriatrics Academic Programs.” Gerontology & Geriatrics. 27(4): 85-95; 2007.)
The Netherlands Implements Teaching Rotation for Fourth-Year Med Students

Often at the cost of teaching, medical schools have grown into academic research centers. It is argued, however, that a scholarly physician from these environments should combine his/her skills in clinical medicine and science with teaching. Furthermore, it is extremely rare to find required or elective curricular opportunities in teaching for medical students. Considering that medicine as a profession has a long history of training its new physicians, it is interesting that the methods of teaching are not found in the curriculum of its medical schools.

A medical school in the Netherlands (University Medical Center Utrecht) created a six-week block in the final year of its medical school program in which the students receive hands-on training that includes a one-week teacher-training course. In addition, there is an elective available called a teaching rotation. Available to four or five students per rotation, those in the rotation meet weekly as a group.

During the four-week rotation, they must develop a rotation plan that includes their personal goals and activities. They then observe teaching by one or more regular medical school teachers. Each student must complete 20 contact hours in independent teaching. Should they want to obtain a teaching qualification, the time is increased to 30 contact hours. Each student is observed three times by a medical school teacher, during which time a checklist is completed. They also must complete an essay based on at least four journal articles in the field of medical education and study the British Medical Journal series called the ABC of Learning and Teaching in Medicine, followed by a written test.

In addition, the students are required to write 14 test questions and then compose an end-of-rotation evaluation in which they look back on their personal goals. Those who complete the rotation occasionally are asked to substitute for a teacher who may be out sick. Students who complete the teaching qualification add this to their curriculum vita, which has been considered to add value to their residency applications. The categories in which students are assessed for the student teaching qualification include

- content expertise
- didactic skill in teaching
- design in education
- practice of education
- assessment of students
- social-communication skills
- professional behavior

(Cate OT. "A Teaching Rotation and a Medical Student Teaching Qualification for Senior Medical Students." Medical Teacher. 29: 566-571; 2007.)