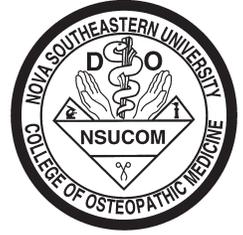


# Medical Education Digest

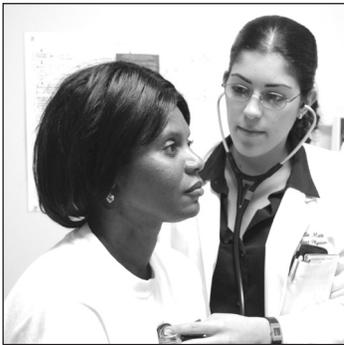


Volume 10, Number 2

Published six times per year by NSU College of Osteopathic Medicine

March/April 2008

## Comfort Levels of Patients and Medical Student Involvement



**A** University of Western Ontario medical school study was conducted to determine if there were differences between specialties as to how comfortable patients were with medical student involvement. This was done to help address the issue of consent and to assure that patients who are involved in medical education are as comfortable as possible. No previous study had been performed to investigate whether patient comfort varies between specialties.

Five specialties in their university outpatient clinics were selected, including family medicine, obstetrics and gynecology, urology, general surgery, and pediatrics that included the practices of 11 physicians. Demographic information was derived from patients, including age, gender, country of origin, specialty of the clinic, and prior experience with students.

In total, 625 surveys were collected, and 429 had prior student involvement experience. The majority of patients ranged in age from 30-65 years, the mean age being 39 years with 62 percent of the group being female. There were more patients from family medicine and obstetrics and gynecology than any other specialty. The patients were asked to rate the following statements on a five-point scale:

- Medical student involvement improves the quality of my care.
- I am satisfied with the amount of time I have had medical students involved in my care.
- I am satisfied with the level of involvement of medical students involved in my care.
- Medical students should become involved in patient care early in medical school.
- Clinical teaching using real patients is important in medical student education.
- I enjoyed my experience with medical student involvement in my care.
- Given a choice between attending a teaching hospital with medical students or a nonteaching hospital without medical students, I would prefer a teaching hospital.

Patients in each of the five specialty clinics had similar comfort levels and attitudes regarding medical student involvement. Patients who indicated they were uncomfortable may still allow student involvement because of altruism. However, the authors conclude that there is an ethical obligation to make the patients as comfortable as possible.

They further state that it is important to obtain the patient's consent prior to involving students and to provide information for them to make an informed decision. Such consent should include the student's gender, degree of involvement, and level of training. They believe this would ensure future patient participation in medical education as well as improved student-patient relationships.

*(Passaperuma K, Higgins J, Power S, and Taylor T. Do patients' comfort levels and attitudes regarding medical student involvement vary across specialties? Medical Teacher. 30:48-54; 2008.)*

*"Medical Education Highlights for Primary Health Care"*

# Medical Error Reporting and Patient Safety

**A** survey was performed of faculty members and resident physicians at teaching medical centers in three regions of the United States to determine if medical errors were reported and what factors impede and facilitate such reporting. The study revealed that physicians' attitudes about reporting are not congruent with their actual behavior. This is in spite of professional, legislative, and federal efforts to encourage error reporting, including the 2005 Patient Safety and Quality Improvement Act. In fact, obstacles to reporting and underreporting errors remain pervasive.

It was recommended that the causes of this should be addressed and that health care institutions should create learning environments in which the discussion of medical errors is valued. This includes respect for those who discuss their own errors. The connection between the analysis of errors and system improvement should be cited by these facilities, and there should be assurances by institutions that the reporting of errors will be confidential, simple, and worthwhile.

Part of this process is the provision of instruction in how to report errors as well as what errors should be reported. In addition, efforts need to be made to change the institutional culture toward the reporting of errors by physicians. If this is not accomplished, the federally protected patient safety reporting system will not be likely to reduce medical error. By promoting patient-centered ethical values, it may motivate physicians to report errors. This is especially true in teaching hospitals since role models are vital in forming trainees' attitudes and practices. This not only may result in good systems but also should enhance good care of future patients.

The study was anonymous and had a response rate of 74 percent, which resulted in including 138 faculty physicians and 200 resident physicians from internal medicine, family medicine, and pediatrics, almost evenly divided between males and females.

*(Kaldjian LC, Jone EW, Wu BJ, Foreman-Hoffman, Levi BH, and Rosenthal GE. Reporting medical errors to improve patient safety. Archives of Internal medicine. 168:1:40-46; 2008.)*

# Medication Errors and Burnt-Out Residents



**A** study that involved pediatric teaching hospitals of Harvard, Stanford, and George Washington universities identified that 20 percent of the 123 pediatric residents were depressed and 75 percent were burnt out. Among those who were depressed, there were six times more medication errors identified than their non-depressed peers.

The study focused only on pediatric residents

and indicated that mental health was considerably more important a factor in medication errors than had been suspected. It was found that depression in the residents studied was twice that expected in the general population. On the other hand, even though the prevalence of burnout was considerably greater than depression, there was no measurable association with medication errors in residents with burnout alone.

However, virtually all of the depressed residents had been burnt out. About half of the depressed residents were unaware of their depression, and only a small number were receiving treatment. Reduced resident work hours in the United States did not have a link between medical error and depression, but it did reduce burnout. The study concluded that because there are a significant number of depressed pediatric residents committing a high rate of medical errors, this is a cause for concern.

Furthermore, there should be efforts to screen residents for signs and symptoms of depression and ensure treatment. Finally, because of the relationship of patients being of potential risk of unintentional harm by health providers who are depressed, the mental health of doctors needs to be a priority.

*(Fahrenkopf AM, Sectish TC, Barger LK, Sharek PJ, Lewin D, Chiang VW, Wiedermann BL, and Landrig CP. Rates of medication errors among depressed and burnt out residents: prospective cohort study. British Medical Journal. February 7, 2008.)*

# Sharks

# Decrease in Medical Student Empathy



The Balanced Emotional Empathy Scale (BEES) was used to determine if there was a change in vicarious (i.e., visceral vs. emotional) empathy in medical students during the first three years of their four-year program. In the past, solutions to reduce the loss of empathy that were reported most frequently included the institution of courses emphasizing empathetic communication skills. However, these have shown gains that are modest or temporary.

Employing problem-based curricula or six-year medical schools appear to have greater opportunities to integrate empathy in medical school curricula. The authors feel that maintenance of professionalism should be part of the medical school curriculum combined with effective bedside teaching. Students at the four-year medical school where the study was performed took the BEES

voluntarily, four times initially at the beginning of year one and finally at the end of their third year. A significant decrease in vicarious empathy was demonstrated.

While BEES was not taken at the end of the fourth year, other studies have shown that a significant decrease in vicarious empathy would continue even into residency training. Their seemed to be no difference in those who chose primary care specialties compared to those who entered other training programs. It was questioned that perhaps the decrease in vicarious empathy that appeared to occur was a coping or survival mechanism. It was suggested that empathy be reinforced through the use of constantly reinforced role-playing throughout the medical school program and even into residency and medical practice.

*(Newton BW, Barber L, Clardy J, Cleveland E, and O'Sullivan P. Is there a hardening of the heart during medical school? Academic Medicine. 83(3):244-249; 2008.)*

## Medical School Expansion Strategies

By 2013, it is expected that allopathic medical school enrollment will increase by 20 percent, most of which being due to larger classes in existing institutions. However, there are a number of other models for increasing class size at existing medical schools. One is the concept of a two-year regional campus where most commonly the clinical portion of the curriculum is offered. A second model is the four-year clinical campus in which all four years are provided under the umbrella of the main medical school campus.

Among the challenges of expansion are those involving student affairs, finances, and planning. Challenges regarding student affairs included concerns about the size and quality of the applicant pool, maintaining student support services, and the adequacy of financial-aid resources. Financial challenges included the costs for new space and facilities, student services and staff, and equipment. Planning challenges were those involving the difficulties of administrators and faculty to accept that not everything could be predicted with certainty. Another was the lack of experience of medical educators and the lack of time for planning.

*(Analysis in Brief. Association of American Medical Colleges. 8: No. 2; 2008.)*

## Planning for Changes in USMLE

The Committee to Evaluate the USMLE Program (CEUP) is addressing a number of key areas regarding the examination. One is the competencies that need to be assessed by the licensing examination. The USMLE is looking for these competencies to be measured in a way that is valid, reliable, and practical. A second is the assessment of the basic science elements that are most important for current and future clinical practice. Another is the determination of the potential impact of the changes proposed on the continuum of medical education as well as on state medical board licensing procedures. The committee also is examining issues regarding score reporting formats. Reconsideration is being given to an integrative approach to the scientific foundations of medicine across all components of the USMLE program.

*(Update on the comprehensive review of USMLE. USMLE. February 1, 2008.)*

# Analyzing Stress in Medical Education

Studies show that 61.4 percent of medical students suffer from stress, and as many as 2.4 percent suffer from this at a high level. A study attempts to assess stress increases in 140 medical and 96 dental students at the University of Heidelberg in Germany through the use of a survey instrument called the Trier Inventory for Assessment of Chronic Stress, which assesses tension in the following areas:

- work overload
- social overload
- overextended at work
- lack of social recognition
- work discontent
- social tension
- performance pressure at work
- social isolation
- worry propensity



The authors suggest that when teaching and learning methods are implemented in a new curriculum, there should be consideration given to stress-related items.

*(Schmitter M, Mirjam L, Beck J, and Rammelsberg P. Chronic stress in medical and dental education. Medical teacher. 30:97-99; 2008.)*

## Training Osteopathic Medical Students in Palpatory Diagnosis

The Virtual Haptic Back (VHB) has been assessed as to its potential value in training osteopathic medical students to learn palpatory diagnosis. Osteopathic physicians palpate the human back in the diagnostic assessment of musculoskeletal abnormalities. Haptics, which refers to the human sense of touch, is employed in osteopathic medicine to detect altered tissue texture that reflects altered tension in the underlying muscle and connective tissue. The VHB is being developed at the Ohio College of Osteopathic Medicine as an aid to teaching and learning palpatory diagnosis. It studied whether the VHB increased users' ability to detect small abnormalities in the back. The study employed 21 first-year osteopathic medical student volunteers who received preliminary training and engaged in eight 15-minute practice sessions. Objective and subjective responses from the students indicated VHB to be of potential value and useful as a teaching aid in learning palpatory diagnosis.

*(Howell J, Conatser RR, Williams II RL, Burns JM, and Eland DC. Palpatory diagnosis training on the virtual haptic back: performance improvement and user evaluations. Journal of the American Osteopathic Association. 108:29-36; 2008.)*



Health Professions Division  
College of Osteopathic Medicine  
3200 South University Drive  
4th Floor, Room 1495  
(954) 262-1469  
Fort Lauderdale, FL 33328-2018  
<http://medicine.nova.edu>

“Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia, 30033-4097; telephone number: 404-679-4501) to award associate’s bachelor’s, master’s, educational specialist, and doctoral degrees. Nova Southeastern University admits students of any age, race, color, sexual orientation, pregnancy status, religion or creed, nondisqualifying disability, and national or ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school, and does not discriminate in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs.”

### Medical Education Digest

The *Medical Education Digest* is published bimonthly through the NSU-COM Office of Education, Planning, and Research

#### Editor

Leonard Levy, D.P.M., M.P.H.  
Associate Dean

#### Associate Editor/Art Design

Scott Colton, B.A.  
Director of Medical Communications