

7-2015

Medical Education Digest, Vol. 17 No. 4 (July-August 2015)

Nova Southeastern University

Follow this and additional works at: https://nsuworks.nova.edu/hpd_com_med



Part of the [Osteopathic Medicine and Osteopathy Commons](#)

NSUWorks Citation

University, Nova Southeastern, "Medical Education Digest, Vol. 17 No. 4 (July-August 2015)" (2015). *Medical Education Digest*. 60. https://nsuworks.nova.edu/hpd_com_med/60

This Magazine is brought to you for free and open access by the College of Osteopathic Medicine at NSUWorks. It has been accepted for inclusion in Medical Education Digest by an authorized administrator of NSUWorks. For more information, please contact nsuworks@nova.edu.

MEDICAL EDUCATION DIGEST



Volume 17, Number 4 • July-August 2015

MEDICAL EDUCATION HIGHLIGHTS FOR PRIMARY HEALTH CARE

MEDICAL EDUCATION DIGEST: THE 100TH ISSUE

Angela Ku, B.A., Assistant to the Editor



Leonard Levy, D.P.M., M.P.H., holds the first edition of the digest from October 1999, while Angela Ku, B.A., holds the May-June 2015 edition.

The *Medical Education Digest* celebrates its 100th issue with this edition. In the digest, published bimonthly every year since 1999, Leonard Levy, D.P.M., M.P.H., identifies current topics in medical education—providing an overview of innovations used to facilitate learning among the medical community.

The item below is from the first volume of the *Medical Education Digest*, published in 1999:

COMING ERA OF RAPID CHANGE IN MEDICAL EDUCATION (OCTOBER 15, 1999)

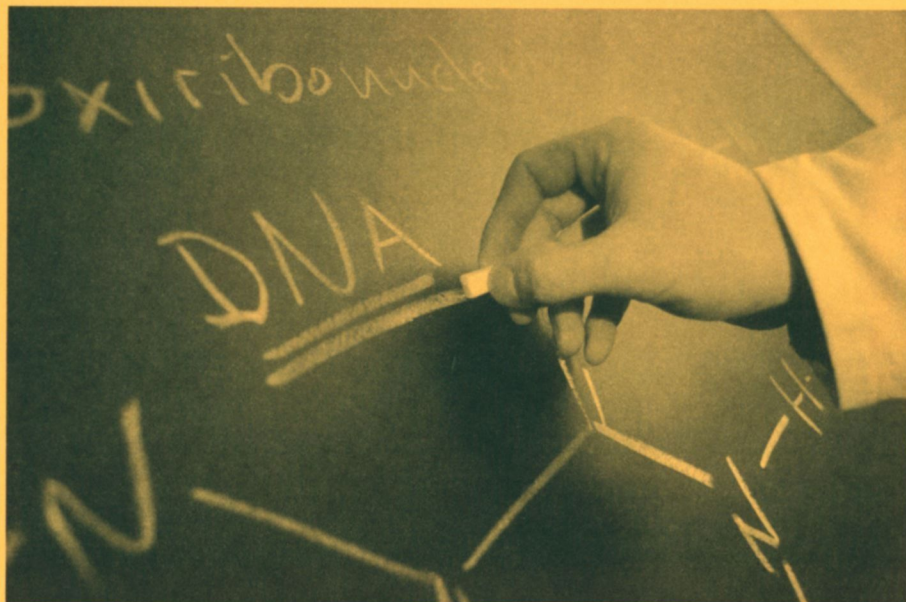
Exponential change in medical education is forecasted over the next 20 years in a commentary by Kenneth V. Iserson, director of bioethics and pro-

fessor of surgery at the University of Arizona. Computer simulations that mimic patient and tissue response will be available as will the ability to prove that medical students are competent in basic clinical procedures. Residents also will be able to practice advanced clinical techniques before performing them on patients. Simulations will guarantee trainees' experiences that they learn while decreasing patient danger and discomfort. Activities like OSCEs (objective structured clinical examination) will become individualized and rigorous, allowing those who achieve competency fast to progress more rapidly through medical school and residency.

Iserson KV. Simulating our future: real changes in medical education. *Academic Medicine*. 1999; 752-754.

Since that time, OSCEs have become a commonly used evaluation technique in undergraduate and graduate medical education. They employ standardized patients (individuals trained to simulate health problems) as well as computer simulations. Today, simulation labs are equipped with advanced robotics simulating a wide array of health problems.

NSU's Second Life—a virtual world tool enhancing socialization and social presence in distance learning—provides students and instructors novel ways to interact, collaborate, and engage, offering students expanding opportunities in their medical education.



ETHICAL PRACTICES REPRESENT AN IMPORTANT PART OF TEACHING GENETICS TO MEDICAL STUDENTS

Ethically sensitive areas of genomics include such issues as the diagnosis of genetic diseases, in vitro fertilization, and the genetic susceptibility to common diseases as well as communication to the general public. Often students find it difficult to apply knowledge on ethical issues to real situations in the clinic.

The experience of faculty members from Riga Stradins University in Latvia is described with regard to ethical problems that are faced when teaching genetics and their solutions. The Human Genome Project has enabled the study of the genetics of common complex disorders such as cardiovascular diseases, cancers, and diabetes in which genetic factors and the environment play a role in the etiology of these diseases. Medical students should understand their responsibility as future physicians to explain, in a sensitive way, that genes are not the only factors responsible for a disease, and the importance of lifestyle should not be underestimated. In individuals identified with the highly penetrant breast cancer gene BRACA-1, they must also explain

lifetime risk, the possibilities of preventive surgery in those determined to be high risk, and efficient treatment measures.

Physicians can help in assisting patients develop a healthy lifestyle by discussing the possible importance of restricting hormonal contraceptives, smoking cessation, and having a physically active lifestyle. The more complex the genetic implication of the disease, the greater the ethical responsibility of the physician in providing genetic counseling. If a patient tells a physician that her sister has been diagnosed with cancer due to the BRACA 1 gene, the physician should be able to inform the patient, in a delicate manner, what her lifetime risk of breast cancer may be. In addition, the physician has to determine whether this information needs to be shared with her husband and daughters.

Nagle E and Kazoka D. Ethical challenges in teaching genetics for medical students. Journal of Microbiology & Biology Education. 15 (2). pp 181-185, 2014.



NURSES AND DOCTORS: SHOULD THEIR EDUCATION BE INTEGRATED?

With the advent of the electronic health record and other health information exchange-related collaborative initiatives, the medical industry is becoming more focused. In a column in *The New York Times*, Dhruv Khullar, M.D., resident physician at Massachusetts General Hospital, explained that it is time for these collaborative initiatives to expand following the way the industry trains its nurses and doctors. He insists that nurses and doctors need to be trained in the same way the industry expects them to perform in their actual professions.

The American Association of Colleges of Nursing reports that there are over 3.1 million nursing professionals in the United States, just under four times the number of licensed physicians. As the most populous medical profession, nurses are the first and most frequent point of contact for many patients. The efforts of nurses are integral to whether physicians will

have any success in their own work. Health care reform is pushing medical professionals toward integrated care, in which collaboration between professions becomes vital.

Incongruent medical education between nurses and doctors becomes evident in practice. Khullar explained that he was expected to lead a team of medical professionals as a first-year resident—including leading some professionals who had far more experience working in a medical setting—in addition to applying the theory of medicine into practice. Integrated education is needed to make the disparate abilities of doctors and nurses complement one another to create a collaborative team.

Khullar, D. Doctors and nurses, not learning together. New York Times, 30 Apr. 2015. Web. Accessed 4 June 2015. <<http://well.blogs.nytimes.com/2015/04/30/doctors-and-nurses-not-learning-together/?src=xps>>.



MEDICAL STUDENTS' JOURNALS SHARE USEFUL GERIATRIC EDUCATION INFORMATION

Through the use of journals, medical students reveal responses to their experiences that include doctoring and communication skills when caring for older adults. They describe their responses to new content in geriatrics and with encounters with older patients in clinical settings during a period when they are developing their identity as physicians.

This includes the evaluation of geriatrics in the curriculum, revealing how students think about professionalism and professional development over time, and how they think about older patients. The use of journaling in medical schools both didactically and as an evaluation method fosters reflection, empathy, and improvement of clinical and communication skills. It showcases not only what is taught, but also what is learned.

Brown University Warren Alpert Medical School integrated content in geriatrics throughout the curriculum. For the purpose of evaluation, journals were kept that allowed the students to respond to weekly questions and share their thoughts about becoming professionals. Regardless of their interest in aging, first- and second-year students wrote weekly entries in their third- and fourth-year clerkships submitted journals every other week. Depending on their year in medical school, they responded to the following questions:

- What are your experiences, reactions, and insights related to geriatrics content?

- What are your experiences, reactions, and insights regarding the older patients (>65 years)?

A five-member interprofessional team with a geriatrician, geriatric fellow, anthropologist, and health service researcher read the individually de-identified journals. There were 30 journals that included 405 entries representing a large number of journal keepers from all the medical school classes. Identified themes from the subject of professionalism and the older patient included the following:

- Students gradually internalize principles of professionalism.
- Students report behaviors that demonstrate increasing professional skills.
- Students become increasingly self-aware regarding their roles as professionals.

It was recommended that journals be a strategy to elicit attitudes and ideas about medical students developing their professional identity as they care for older adults, while becoming competent physicians.

Shield RR, Farrell TW, Campbell SE, Nanda A, and Wetle T. Professional development and exposure to geriatrics: medical student perspectives from narrative medicine. Gerontology & Geriatrics Education. 36 (2). pp144-160; 2015.

THE IMPORTANCE OF FORMAL INSTRUCTION IN THE DELIVERY OF HIGH-VALUE HEALTH CARE

The University of California, San Francisco created an interprofessional program designed to train students from medicine, dentistry, nursing, and pharmacy to develop competencies in the delivery of high-value health care. It addressed the importance of creating universal health professions education for health care value that defines a comprehensive set of competencies spanning a variety of learners at various stages of training.

The need to train all members of interprofessional clinical teams in the basic concepts of health care value was emphasized. A task force included faculty members from all of the involved professions. The task force developed a set of comprehensive competencies that described proficiencies related to the stewardship of resources and the practice of cost-conscious care.

Proposed competencies were divided into the following categories: beginner, proficient, and expert. The beginner category included competency in the health professional being trained to be able to describe the various components of health care value. Examples of this category include the principles of health care delivery, organization and financing, strategies to control costs, access and resource allocation, the effect of insurance on demand, and the ability to discuss cost-conscious care with patients, providers, administrators, and leaders.

Among the competencies in the category labeled as proficient included being able to demonstrate an understanding of the need for change in clinical approaches, health care system incentives and restrictions, as well as being able to advocate for improving access, quality, and cost-effective care. Competencies at the expert level included such items as training staff to develop cost-effective clinical programs and having a capacity to employ political economy theory in analyzing current health care system politics analyzing clinical, human resources, and fiscal implications of introducing new devices and interventions.

Moriates C, Dohan D, Spetz J, and Sawaya GF. Defining competencies for education in health care value: recommendations from the University of California, San Francisco Center for Healthcare Value Training Initiative. Academic Medicine. 90 (4); 2015.



FEMALE MEDICAL STUDENTS OUTSCORE MALES IN OB/GYN COMPONENT OF THE NBME

The percentage of female residents in obstetrics and gynecology (OB/GYN) increased dramatically from 12 percent in 1980 to 77 percent in 2006. Since females in OB/GYN work fewer hours per week than men, this may affect the availability of the specialty per unit population.

There has been a 50 percent reduction in male graduates of OB/GYN residencies between 1998 and 2003—a phenomenon that no other specialty has experienced. Studies show that females outperform males in OB/GYN clerkships. A study at the Icahn School of Medicine at Mount Sinai that included 305 students, 163 (53.4 percent) women, and 142 men (46.6 percent) showed that women outperformed men in the OB/GYN clerkship.

Women also outscored men on the standardized National Board of Medical Examiners (NBME) subject examination in OB/GYN. This was in spite of women scoring lower on standardized preclerkship examinations (e.g., MCAT, USMLE Step 1). It was also shown that although women had better overall scores than men in the OB/GYN clinical clerkship, they did not score higher on patient relationship scores. Similarly, while women received higher final grades than men in the OB/GYN clerkship, there was no difference in clinical evaluation scores. In addition, the study revealed a higher percentage of women majored in the humanities, suggesting that they had less background in the basic sciences than male students.

It was thought that this may be the reason women had lower MCAT and USMLE Step 1 scores. Female students also appear to be more interested in learning about women's health and in patient education and prevention. This is offered as an explanation of why they outperform men in retention of material, which leads to better scores on the NBME subject examination in OB/GYN and on the related USMLE Step 2 CK. With the increasing number of practicing female OB/GYNs, it is also suggested that male students are finding fewer male role models. While some studies have been done, more need to be conducted to try to identify how to improve male student performance in the OB/GYN clerkship.

Bibbo C. Bustamante A, Wang L, Friedman F, and Chen K. Toward a better understanding of the gender-based performance in obstetrics and gynecology clerkship: women outscore men on the NBME subject examination at one medical school. 90 (3). pp. 370-383; 2015.

PROFESSIONALISM AND UNDERGRADUATE MEDICAL EDUCATION

Research showed students who have deficiencies in professionalism in medical school continue to display deficiencies in residency and practice, placing patients at risk for harm. In addition to achieving academic standards, standards of non-cognitive behavior include honesty, professional behavior, dedication to learning, professional appearance, respect for law and others, confidentiality, and issues regarding substance abuse. These go beyond expectations in knowledge and reasoning skills and include nine core interpersonal and intrapersonal competencies for entering medical students. They are

- ethical responsibilities for self and others
- reliability and dependability
- service orientation
- social skills
- capacity for improvement
- resilience and adaptability
- cultural competence
- oral communication
- teamwork

These competencies are predictive of success at the majority of medical schools in clinical rotations and later practice. Components in the admissions process to address this are

- 2015 introduction to the MCAT of testing requiring demonstration of an understanding of social and behavioral factors that contribute to health
- guidelines for letters of reference ensuring inclusion of information about core competencies
- documentation of personal experiences
- introduction of multiple mini-interviews, including responses to various scenarios
- inclusion of the situational judgement test (SJT) assessing response to various situations

Kirch DG, Gusic ME, and Ast C. Undergraduate medical education and the foundation of physician professionalism. Journal of the American Medical Association. 313(18). pp. 1797-1798; 2015.


THE MEDICAL EDUCATION DIGEST IS PUBLISHED BIMONTHLY
THROUGH THE NSU-COM OFFICE OF RESEARCH AND INNOVATION.

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

Assistant to the Editor: Angela Ku, B.A.

Editing: NSU-COM Office of Medical Communications and Public Relations

Graphic Design: Brandee Evans

**NOVA SOUTHEASTERN
UNIVERSITY**
College of Osteopathic Medicine

3200 South University Drive, 4th Floor, Room 1495

Fort Lauderdale, FL 33328-2018

(954) 262-1469 • <http://osteopathic.nova.edu>

Nova Southeastern University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate's, baccalaureate, master's, educational specialist, doctorate, and professional degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Nova Southeastern University. • Nova Southeastern University admits students of any race, color, sex, age, nondisqualifying disability, religion or creed, sexual orientation, or 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.

Continuing Medical Education Credit Form/July-August 2015

One (1) hour of continuing medical education credit may be obtained by reading the *Medical Education Digest* and completing the following evaluation that is being used to assess the reader's understanding of the content. Please circle the answers you believe to be correct for all four questions located on this two-sided form. To acquire CME credit, physicians must mail, fax, or deliver the form (also available online at <http://medicine.nova.edu>), including both the completed quiz and evaluation form by **August 15, 2015** to: Office of Education, Planning, and Research, Nova Southeastern University College of Osteopathic Medicine, 3200 South University Drive, Fort Lauderdale, Florida 33328. Email: lspeiser@nova.edu; Fax: (954) 262-3536. **Please complete and return the evaluation form attached on the reverse side by fax or email.**

AOA or AMA No. _____ Print Full Name _____

The correct answers will be published in the next issue of the *Medical Education Digest*.

1. *Nurses outnumber physicians by about:*

- a. 2 to 1
- b. 3 to 1
- c. 4 to 1
- d. 5 to 1

2. *Women applicants to medical schools outscore men in:*

- a. USMLE Step I
- b. MCAT
- c. OB/GYN clerkship
- d. Clinical evaluation scores

3. *Medical students should understand their responsibility as future physicians to explain in a sensitive way that factors that may prevent breast cancer include all except:*

- a. genes
- b. lifestyle
- c. smoking cessation
- d. educational status

4. *A competency categorized as "proficient" in the high-value delivery of health care is:*

- a. analyzing health care system initiatives
- b. describing components of health care value
- c. describing principles of health care delivery
- d. describing the effect of insurance on demand

Answers to the May/June 2015 CME questions: 1. (C) 2. (A) 3. (C) 4. (A)

Target Audience and Objectives

The target audience includes physicians who have faculty appointments at a medical school or who train residents and fellows in hospital-based environments. It also is for non-physician faculty members who have the responsibility for teaching medical students and others who seek education in the continuum of medical education (e.g., residency, continuing education). Also, since residents are typically responsible during their training to train medical students, they too are part of the audience to which the *Medical Education Digest* is directed.

- To provide an overview from the world literature of medical education knowledge, concepts, and skills of contemporary, new, and innovative ways to facilitate learning among medical students, residents, and practicing physicians
- To identify sources of information regarding the medical education process
- To create curiosity among those responsible for the medical education process to read in depth some of those articles that are summarized in the *Medical Education Digest*.

Evaluation Form Medical Education Digest

In a continuing effort to fulfill your professional interests and to improve the educational quality of continuing education, please complete this form. Please darken bubble

1) Your field / degree: MD DO/AOA # _____

- | | Strongly Agree | Agree | Neither Agree Nor Disagree | Disagree | Strongly Disagree |
|---|-----------------------------|-----------------------------|--------------------------------------|-----------------------------|--------------------------|
| 2) Reading this issue of Medical Education Digest has influenced the way that I will treat future patients. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3) The contents of this issue will be useful in my practice. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4) Was disclosure of commercial relationships made? | | | <input type="radio"/> Yes | | <input type="radio"/> No |
| 5) Were off-label products described? | | | <input type="radio"/> Yes | | <input type="radio"/> No |
| 6) Did you perceive any inappropriate commercial bias or influence? | | | <input type="radio"/> Yes | | <input type="radio"/> No |
| 7) What is the best way to contact you in reference to future articles? | | | | | |
| | <input type="radio"/> Phone | <input type="radio"/> Email | <input type="radio"/> Correspondence | <input type="radio"/> Other | _____ |

If you desire credit, please complete the areas below:

I have read this issue, approved for 1 hour of AMA-PRA category 1 credit & AOA category 1-B credit.

Signature

Date

PLEASE PRINT THE FOLLOWING:

Name: _____ Tel: _____ Fax: _____

Mailing Address: _____ Email address: _____

Accreditation Statements

ACCME

Nova Southeastern University Health Professions Division is accredited by the ACCME to provide medical education for physicians. This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through Nova Southeastern University Health Professions Division. Nova Southeastern University Health Professions Division designates this educational activity for a maximum of one (1) hour towards the AMA Physician's Recognition Award Category 1 Credit(s)TM. Physicians should only claim credit commensurate with the extent of their participation in the activity.

AOA

Nova Southeastern University College of Osteopathic Medicine is an accredited Category 1 sponsor of the American Osteopathic Association. One (1) hour of continuing medical education credit in Category 1-B is being offered through the American Osteopathic Association for this program.

Grievance Policy

Complaints should be submitted in writing to the Department of Continuing Medical Education, Nova Southeastern University Health Professions Division, Terry Building, 3200 S. University Drive, Room 1459, Fort Lauderdale, FL 33328.