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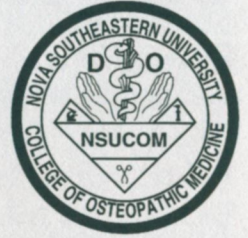
Part of the Osteopathic Medicine and Osteopathy Commons

Advanced Degree in Public Health Preparedness Established

A multidisciplinary program leading to the degree of Master of Homeland Security was developed at Pennsylvania State University College of Medicine. It included collaboration by the medical school with the Pennsylvania Department of Health, Pennsylvania National Guard, and multiple colleges at Pennsylvania State. The program recognizes the emerging professional discipline of homeland security. In addition, it emphasizes that this new profession cannot survive unless there are leaders who seek to improve it through scientific research, which also ultimately leads to add legitimacy to this field. The academic community is positioned to develop leaders in homeland security that can influence issues of counterterrorism and facilitate the development of an informed and prepared public. The core areas of focus in the program are

- public health preparedness
- epidemiologic evaluation
- disaster communication
- agricultural biosecurity
- disaster psychology
- critical infrastructure protection.

Program information is available at *http://www.worldcampus.psu.edu/MasterinHomelandSecurity.shml*.

Following is the curriculum, which is offered online, with each course being three credits:

- Public Health Preparedness for Disaster and Terrorist Emergencies I
- Public Health Preparedness for Disaster and Terrorist Emergencies II
- Natural Disasters
- Politics of Terrorism
- Disaster Psychology
- Agricultural Biosecurity: Protecting a Key Infrastructure
- Public Health Evaluation of Disasters and Bioterrorism
- Critical Infrastructure Protection of Health Care Delivery Systems
- Disaster Communication
- Research Project

(Cherry RA and Davis T. "The Road to Developing an Advanced Degree Program in Public Health Preparedness." Academic Medicine. 82 (8). 773-780; 2007.)

"Medical Education Highlights for Primary Health Care"

Preclinical Chronic Care Training Modules

In recognition of the fact that there is a great worldwide prevalence of chronic disease that causes death, does not spontaneously resolve, usually is incurable, and changes lifestyle, chronic care education should begin early in medical school training. The University of Texas Health Science Center at Houston integrated two instructional modules into a second-year medical elective four-week summer ambulatory care clerkship that is part of a family medicine preceptorship. They are aimed to teach

- screening for diabetic neuropathy and counseling for improved foot care

- screening for tobacco use and providing smoking cessation counseling

Each of the modules includes

- written objectives
- brief clinical intervention
- faculty orientation to process
- student orientation to process
- patient encounters by students
- assessment materials for evaluation
- documentation materials
- postcards to obtain patient reactions
- evaluations by supervising physicians

The first module screens for diabetic neuropathy using the Semmes Weinstein monofilament test and is followed by communication of the results to patients. The second module uses the Centers for Disease Control and Prevention guidelines and documentation materials. It was demonstrated that students were able to learn these skills and contributed to the practice of their preceptors. It also was concluded that both the physicians who participate and the patients could benefit from these instructional modules.

("Nieman LZ. "A Preclinical Training Model for Chronic Care Education." Medical Teacher. 29. 31-393;2007.)

Internet Use in Geriatrics Education
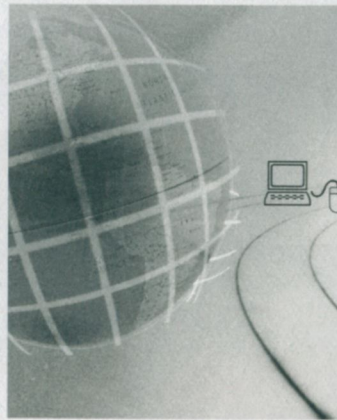
The Internet is used in more than 95 percent of geriatrics medical education programs for administrative and communications functions and is now becoming more widely used to augment traditional clinical education. Online content for clinical education in geriatrics is also expanding. Because of this, there is a need to develop tools to evaluate this modality.

The Harvard University Consortium of E-Learning in Geriatrics Instruction conducted a study to evaluate online content for geriatrics education. The survey included 130 U.S. medical education programs that trained medical students, interns, residents, fellows, and practicing physicians with a 52.3 percent return rate (68 programs). At least 25 percent of the curriculum was Internet-based for 23 undergraduate, 31 graduate, and 26 continuing education programs. Six domains were included in the survey, including

- program description
- Internet presence
- Internet teaching
- training and evaluation
- materials and development
- barriers

The programs that used and developed Internet materials had more full-time faculty and non-clinical faculty. The study concluded that the Internet is being widely used in medical geriatrics education and that online content for geriatrics education will be increasingly common. The authors also indicated that the challenge is to ensure the accuracy of the content and that it be skillfully designed and appropriately infused in the curriculum, employing only high-quality materials within suitable settings.

(Hajjar IM, Ruiz JG, Teasdale TA, and Mintzer MJ. "The Use of Internet in Geriatrics Education: Results of a National Survey of Medical Geriatrics Academic Programs." Gerontology & Geriatrics Education. 27 (4) pp. 85-95; 2007.)

Online Teaching of Performance-Oriented Mobility Assessment

Falls are the leading cause of injury deaths among the elderly. The Performance-Oriented Mobility Assessment (POMA) is an instrument that identifies the risk of a patient falling with both high reliability and validity. The University of Miami Miller School of Medicine (UMMSM) has a four-year longitudinal curriculum in geriatrics that is competency-based for dementia, falls, and delirium and requires students to demonstrate core competency in each of these areas prior to graduation.

They must be able to use the POMA according to standardized guidelines that traditionally employ actual or standardized patients. Considerable variability was noted in the students' mastery of the POMA, resulting in the development of a standardized approach to POMA training with the inclusion of the iPOMA tutorial. The iPOMA multimedia tutorial is 30-40 minutes long and provides instruction on how to administer the POMA. Each task explained is followed by a scoring practice exercise and feedback on the results of the exercise. It is delivered to students asynchronously via a Learning Management System (Angel LMS) and can be accessed at *www.geriu.org*. The LMS tracks the completion of the tutorial.

The iPOMA's effectiveness is measured during the online sessions with a pre-tutorial questionnaire, a post-tutorial quiz, and a post-tutorial questionnaire. In a study by the UMMSM to assess the utility of the iPOMA, it was found that there was a significant increase in skill efficacy and a modest correlation between post-tutorial self-efficacy ratings and scores. The study provided preliminary evidence of the effectiveness and efficiency of a multimedia interactive POMA to train medical students in properly administering and scoring the POMA.

(Ruiz JG et al. "An Interactive E-Learning Tutorial for Medical Students on How to Conduct the Performance-Oriented Mobility Assessment." Gerontology & Geriatrics. 28 (1) 51-50; 2007.)

Emergency Medicine Residents' Malpractice Fears

A study that included 46 emergency medicine residents at five four-year California residency programs attempted to determine the evolution of defensive medicine among their residents. The study was conducted because of rising costs of malpractice claims and insurance, which has led to defensive medicine that caused health care providers to have—as their major intent—avoiding criticism and lawsuits rather than providing for the needs of the patient. This results in 5-10 percent of diagnostic tests and therapeutic interventions being performed because of fear of litigation, with costs ranging from $9 to $18 billion annually.

The study assessed emergency medicine residents' incoming levels of defensive medicine and malpractice concern and whether these levels changed when they completed their residencies. The study showed that physicians who enter four-year emergency medicine residencies and have moderate malpractice concerns and concerns about defensive medicine are not markedly impacted in their decisions within the emergency department, nor do their malpractice or defensive medicine concerns change significantly over time. It was also noted, however, that the fear of malpractice litigation does decrease the enjoyment interns experience, but that this effect decreases when they complete their residencies.

(Rodriguez RM et al. "A Longitudinal Study of Emergency Medicine Residents' Malpractice Fear and Defensive Medicine." Academic Emergency Medicine. 14 (6). 569-573; 007.)

Incisive Study on Future of Medical Licensure

As a result of being called to greater accountability, the future of medical licensure is uncertain, and medical organizations are trying to assure the public that physicians are maintaining their competency over their practice lifetime. In 2005, a national summit on physician self-regulation represented by 35 major medical organizations developed goals that included how to define a competent physician, how that competency would be measured, and how would medical organizations assure the public that such competency is maintained over the lifetime of practice.

A second summit considered the concern of the lack of portability of licensure since the system is state-based and lacks uniformity. It was preferred that there be a nationally recognized licensure system but not a federal license. The question was raised as to whether it makes sense to have a full and unrestricted license rather than a license specific to a discipline or specialty. It was asked whether board certification should be linked to licensure so that one would be fully licensed only after receiving board certification. There was further consideration as to whether a license should be specialty-based or even based on an individual physician's specific scope of practice.

In addition, another question was whether a system could be developed to allow for license portability on a national and even international scale, especially with increasing globalization pending the creation of an international accrediting system.

(Thompson D. "The Future of Medical Licensure in the United States." Academic Medicine. 81 (12 Supplement): S36-S39; 2006.)

Mini Interviews of Medical School Applicants

The admissions committees of the University of Calgary Faculty of Medicine and other medical schools increasingly are questioning the current structure of the interview process and the validity and reliability of this ritual. In 2005, it was decided by Calgary to cease the interview process that it had been using, which had included two interviews by each of two interviewers for one-hour periods.

Calgary changed its process by developing scenarios to assess non-cognitive traits that included compassion, empathy, honesty, integrity, ability to tolerate ambiguity, reflective, and respect for others. This included developing different scenarios for the same non-cognitive traits. Interviewers included one-third faculty members, one-third students, and one-third community members, each of who is provided with his or her assigned scenarios two days before the interview day. The applicants are informed of the process on the Admissions Office Web page and in writing. The process did not require more interviewers, did not cost more, and was accomplished in less time so that more applicants could be interviewed.

Calgary indicated that the process also allowed it to increase its pool and interview more applicants who demonstrated strong performance in non-cognitive areas. The university also conducted a survey of both interviewers and applicants, providing evidence that the new process was acceptable to them.

(Brownwll K, Lockyer J, Collin T and Lemay JF. "Introduction of the Multiple Mini Interview into the Admissions Process of the University of Calgary: Acceptability and Feasibility." Medical Teacher. 29. 394-396; 2007.)