

Students from NYU Colleges of Nursing and Dentistry and the School of Medicine gathered for an unprecedented educational experience to gain a stronger understanding of one another's roles and responsibilities. Here, dental student Emad Adbou demonstrates the oral exam on a professional actor playing a patient while nursing student Nina Barrett and medical student Luke Ginocchio look on.



PREPARING TO WORK TOGETHER: INTERPROFESSIONAL LEARNING EXPERIENCE UNITES NURSING, DENTAL, AND MEDICAL STUDENTS

The patient came to Bellevue Hospital Center with a six-month history of fatigue, increased thirst, frequent urination, blurry vision, persistent bad breath, pain while chewing, and sore, bleeding gums. She had not seen a physician since losing her job—and her health insurance—two years earlier.

She could have wound up in a dentist's, physician's, or nurse practitioner's office. But on September 9, 2013, this patient—actually a professional actor trained to play a sick person—had the good fortune to be examined by students of all three professions, working together.

The scenario was part of an unprecedented educational experience, held over three days in September, in which 84 fourth-year dental students, 168 second-year medical students, and 84

nurse practitioner (NP) and nurse-midwifery students gathered in small groups at the New York Simulation Center, operated by NYU School of Medicine at Bellevue. They came together to learn from one another and gain a stronger understanding of the roles and responsibilities of each profession—part of a broader effort to move students toward working collaboratively to improve patient care and safety.

**Nursing, dental,
and medical students
break down silos
before entering the
workforce.**

“There has been a lack of accurate knowledge about the scope of practice of each profession, which actually harms patients,” says **Erin Hartnett, DNP '11, APRN-BC, PCNP**, director of the Teaching Oral-Systemic Health program at the College of Nursing, funded by the U.S. Health Resources and Services Administration. “Interprofessional learning experiences build knowledge about, respect for, and trust of each other's professions.”

Each team of five students met for 75 minutes with a “patient,” documenting his or her case history and taking turns teaching one another how to assess the individual from their unique perspectives. With faculty observing from outside of the room, NP and nurse-midwifery students showed their teammates how to conduct a pulmonary assessment, dental students taught the oral exam, and

medical students demonstrated a cardiac assessment. At the end, each group met with a faculty advisor to discuss their thoughts on the collaboration and the next steps for the patient, which involved using a team approach to managing both the patient's diabetes—the presumptive diagnosis—and periodontal disease.

During the simulation, **Elsie Laryea, RN**, a third-year Adult Primary Care NP student who works on a medical-surgical unit at Montefiore Medical Center, clarified for the medical and dental students the meaning and role of the NP. The other students, she says, had assumed that a nurse practitioner merely assessed patients and then referred them to physicians for care.

“It is extremely important for the disciplines to learn together, and we can learn a lot from each other,” Laryea says. “Now, when the dental student graduates, he knows he can refer patients to an NP.”

From her dental student teammate, Laryea learned more specifically where in the mouth to look during an exam, how to touch the mouth, and how to apply pressure gently. From her medical teammate, she learned how to distinguish whether the patient had a systolic or diastolic heart murmur.

Fourth-year dental student **Tiffany Ralescu** explained to her team the connection between diabetes and periodontal disease, as well as how dentists treat the latter.



Tiffany Ralescu

“The other students hadn't known that dentists do different kinds of cleanings depending on the situation,” Ralescu says. “Above-the-gum cleanings are most common, but if a patient hasn't had

regular cleanings or has genetic issues or plaque buildup below the gums, a dentist needs to clean under the gums. We explained how you numb each quadrant of eight teeth and scrape against the root to remove irritants. They were amazed.”

In turn, Ralescu was surprised by the complexity of cardiac tests that medical students conduct, and all noticed that the NP students asked questions with a unique spin, “because they see the full human being as opposed to just the cause of their disease. They asked how the patient was doing psychologically.”

Kristin Gomes, RN, a nurse-midwifery student, believes that, as preventive



Kristin Gomes

care takes on greater prominence in the health care system, it will be even more important for health care team members to understand one another's roles for more effective referral and management of patients. She says that her experience working in an interdisciplinary team at Mount Sinai Medical Center has been a largely positive one. Still, Gomes notes, “I was very surprised and empowered by this experience. I found there was a lot of interest in learning what a nurse-midwife and NP are, and how they are different from physician assistants. It was a great opportunity for me to teach the others more about preventive care and about the scope of practice of advanced practice nurses.”

Gomes was impressed with her dental partner's presentation of the oral exam and says that she will use the information she learned with all of her patients, but especially with those who are pregnant. The medical students, she says, were very thorough and precise in performing a

physical exam, and Gomes contributed information about adapting the exam to different body types, for example, for those patients who are obese or pregnant.

Allyson Herbst, a second-year medical student who participated in the exercise,



Allyson Herbst

says, “Diabetes involves many aspects of patient care. Even though it's a systemic problem, a patient can present at the dentist's, because the disease presents a number of oral health problems. In addition, physicians and nurse practitioners need to understand the oral aspects of disease, because patients will raise these issues.”

Teamwork Improves Quality and Safety

The move toward interprofessional education for health care workers has been gaining steam since the Institute of Medicine released a set of quality and safety reports, beginning in 2001 with the groundbreaking *Crossing the Quality Chasm: A New Health System for the 21st Century*, which pointed to the importance of breaking down silos between professionals before they even enter the workforce.

“Those reports spoke to the need to educate health professionals as high-functioning teams to improve quality and safety in terms of patient care and outcomes,” says **Judith Haber, PhD '84, MA '67, APRN-BC, FAAN**, the Ursula Springer Leadership Professor in Nursing and associate dean of graduate programs at the College of Nursing. Haber adds that a *Lancet* report in 2010 fueled the campaign for interprofessional education in health care.

“We didn't start the trend, but we were among the earliest adopters of interprofessional education,” says Haber, who



co-directs the Oral Health Nursing Education and Practice (OHNEP) initiative at NYU.

The alliance formed between NYU Colleges of Nursing and Dentistry in 2005 has been a catalyst for collaboration in research, teaching, and practice. The College of Nursing and NYU School of Medicine also have an interprofessional-learning program under way, with a grant from the Josiah Macy, Jr., Foundation, through which the two schools have designed and implemented the NYU₃T (Teaching, Technology, and Teamwork) initiative.

According to **Kenneth Allen, DDS '73, MBA**, associate chair and clinical associate

Adult Primary Care NP students Elsie Laryea (right) and Minjae Nam (center) talk with dental hygiene student Almas Bhatti (left) about the interprofessional experience during a break.



Leo Sorel

professor in the NYU College of Dentistry, the September exercise represented a turning point in interprofessional health care education at NYU.

“Throughout the rest of their lives, these professionals should and will be interacting with one another,” says Allen. “Dental students loved it, and everyone benefited.” He adds that the dental students were particularly amused by other students’ inhibitions over putting their fingers in someone’s mouth.

Driving the curriculum for the day was the document *Core Competencies for Interprofessional Collaborative Practice*, published by the Interprofessional Education Collaborative in 2011, which spells out the ways in which the health care professions must deliberately work together to build a better, patient-centered health care system.

With faculty observing, NP and nurse-midwifery, dental, and medical students, respectively, taught their future colleagues to conduct a pulmonary assessment, oral exam, and cardiac assessment.

Health care has always been a team effort, says **Thomas Riles, MD**, the Frank C. Spencer Professor of Surgery and associate dean of medical education and technology at NYU School of Medicine. But, “where it used to be mainly physicians and nurses working together, now there are other professionals involved, so we really have to think about how teams work, which is essential for patient safety.”

Riles notes that at the New York Simulation Center, nurses and medical residents already train in teams. In obstetrics, for example, a team may consist of nurses, anesthesiology residents, ob-gyns, and even nonmedical hospital staff who might work together to address a problem such as a maternal hemorrhage.

“One thing that really struck home with the students was that none of these professionals can completely handle these patients’ problems by themselves,” says Riles. “Just the simple understanding that a good patient outcome requires the efforts of several people was eye-opening.”

“It was fabulous, amazing,” says Haber. “This was a first-of-a-kind event at NYU, and it was a dream come true, watching these students learn together.” ■