

NYU Dentistry/Henry Schein Cares Global Student Outreach Program's Public Health Promotion Strategy

OVER THE PAST 20 YEARS, NYU College of Dentistry's global student outreach program has provided oral healthcare services to thousands of children and adults living in medically underserved areas in Alaska, the Dominican Republic, Ecuador, India, Jamaica, Grenada, Honduras, Maine, Mexico, Nepal, upstate New York, Nicaragua, and Tanzania. A reassessment of the original outreach model, which focused specifically on providing emergency and restorative care, got underway in 2009 when the NYU Dentistry/Henry Schein Cares Global Student Outreach Program was established — thanks to a generous gift from Henry Schein Cares — with the goal of narrowing the disparity in the delivery of oral healthcare services and information to underserved communities both domestically and globally.

In the intervening years, the program, under the leadership of Dr. Stuart M. Hirsch, vice dean for inter-

national initiatives and for student affairs, has sought to encompass five major objectives, as follows:

- Creating sustainable healthcare models;
- Enriching NYU students' education through public health experiences;
- Nurturing participants to become socially responsible healthcare providers;
- Achieving sustainable improvements in children's oral health; and
- Effecting systems-level changes to reduce disparities in oral health.

Today's global outreach model delivers essential care to populations in need and also provides participants with a unique service-learning experience, opportunities to conduct critically needed research, and an increased awareness of access-to-care issues, while fostering a passion for volunteerism and social responsibility.



The NYU Dentistry/Henry Schein Cares Global Student Outreach team in Machias, Maine

Ms. Rachel Hill in Granada, Nicaragua



From left: Dr. Alexis Cohen, '12,
Dr. David Treff, '08, and
Ms. Annette Huynh



Mr. Billy Kwon, '17, with students from the
Srongtsen Bhrikuti Boarding High School in
Kathmandu, Nepal



Though adult oral health care remains an important part of the NYU Dentistry/Henry Schein Cares Global Student Outreach Program, pediatric dentistry has become its central focus. “We realized several years ago that creating a sustainable model would require redirecting our efforts toward early childhood prevention. By working with children, we could effectively measure clinical outcomes, give our students a well-rounded educational and clinical experience, and have a positive impact on oral health for future generations of adults,” says Rachel Hill, senior director of global outreach and international initiatives.

Like pediatric dentistry, public health dentistry has become a major focus of NYU Dentistry’s global outreach model. A mandatory public health component was added to students’ clinical rotations in 2015 as a means of exposing them to the everyday challenges faced by people in the communities they serve, and raising their awareness of the social determinants of oral health. While on outreach, students venture beyond the clinic each day to participate in activities such as tours of local health clinics and informal group discussions with community members.

“In Nepal, we visited the Tsering Elder Home in Boudha, which provides housing for approximately 50 Tibetan refugees. Listening to these elders’ stories — how they fled their homes and came to live there — made me feel fortunate and proud to offer services that can impact their world in such a special way,” says Billy Kwon, class of 2017.

Students typically refer to their outreach experience as “transformative,” saying that it challenged them to rethink their roles as healthcare providers. “When you meet patients who have traveled half a day, often waiting several hours to receive care at a remote clinic, you begin to realize the value of what we provide,” explains Mr. Kwon.

Dr. Alexis Cohen, '12, assistant professor of pediatric dentistry, recalls her first visit to Kathmandu, Nepal. “The children at the Srongtsen School displayed some of the most severe cases of untreated tooth decay I’d

ever seen, as if the gum and bone tissue had been cut away,” she says. In 2013, our research revealed an 83 percent prevalence of dental caries in children at the boarding school. Due to the number of emergency procedures required, not all children were able to receive comprehensive care that year. A daily toothbrushing regimen was introduced, however, and local teachers were trained to apply fluoride varnish at regular three-month intervals.

When the College’s global outreach team returned to Kathmandu in 2014, team members applied silver diamine fluoride (SDF) — a low-cost, non-invasive treatment for dental caries — to the children’s affected primary teeth to arrest decay and maintain spaces for their future permanent teeth.

Based on patient data measuring the effectiveness of treatment and prevention methods, over half of those Nepalese children diagnosed with dental caries in 2014 showed arrested caries by the subsequent fall. “In children treated with silver diamine fluoride in 2014, our research also demonstrated a significant decrease in the number of demineralized surfaces when the children returned to our clinic in 2015,” says Christopher Tung, research administrator for global outreach programs.

With help from public health providers, government officials, and school administrators in each outreach location, the NYU Dentistry/Henry Schein Cares Global Student Outreach Program aims to generate long-term effects in the areas that it serves. “It’s less about having a program on every continent and more about doing things in a way that will benefit both the population living in that area and our students’ educational experience,” says Ms. Hill. In addition to implementing daily toothbrushing in schools, the College educates students, parents, teachers, and caregivers on the importance of oral health and how it relates to systemic health. “Our goal is to empower these community members — to teach them to take their health into their own hands and do whatever they can to prevent dental caries in their kids,” adds Ms. Hill. ■