



# Word of Mouth:

*Smile Bangladesh Repairs Clefts  
and Restores Lives*

BY KATE O'NEILL

700 *NewSmiles*



rural Bangladesh,

700 new smiles

have appeared since 2006. Each one resulted from the repair of a cleft palate or lip, performed by the specialists who volunteer for Smile Bangladesh.

Smile Bangladesh, a New Jersey-based, nonprofit medical organization, promotes, provides, and expands health care access for the medically underserved. “The objectives of this international initiative make it a perfect fit for the medical school’s missions in clinical care, education, and



CHRISTINA ROZARIO

community health,” says Javier Escobar, MD, professor of psychiatry and associate dean for global health at Robert Wood Johnson Medical School. “I enthusiastically support it. And I look forward to developing a new elective for our students, in which they will accompany Smile Bangladesh and learn not only about cleft repair, but also about inequities and opportunities in global health.”

The need for the team’s expertise is overwhelming. In this small, densely populated South Asian nation—formerly East Pakistan—an estimated 300,000 Bangladeshis, out

of a total population of 161 million, have a facial cleft, or cleft anomaly: a split lip, palate, or a combination of both. One in every 600 to 800 Bangladeshi babies is born with a cleft, while the worldwide average is one in 1,000. Yet the nation has only 15 plastic surgeons, and few of them are trained to repair cleft deformities. This gives Smile Bangladesh two leading objectives: not only to make cleft repairs more widely available through their surgical missions, but also to train Bangladeshi medical personnel to perform the procedures.

## A Diverse Team

**h**e president and cofounder of Smile Bangladesh is Shahid Aziz, MD, DDS, DMD, associate professor of oral and maxillofacial surgery and plastic and reconstructive surgery, Rutgers School of Dental Medicine (formerly New Jersey Dental School) and Rutgers New Jersey Medical School. A 1991 graduate of Rutgers College, he is an attending surgeon at University Hospital, in Newark, and Hackensack University Medical Center.

Dr. Aziz had already been on several cleft repair missions to South America when he learned of the vast need for his specialty in Bangladesh. Although his father was a native Bangladeshi who immigrated to the United States in his youth, Dr. Aziz first visited the country on a cleft repair mission in 2006. During that trip, he met Christina Rozario, then deputy director of Impact Foundation Bangladesh, who was coordinating floating hospital missions that delivered health care to people in hard-to-reach inland communities.

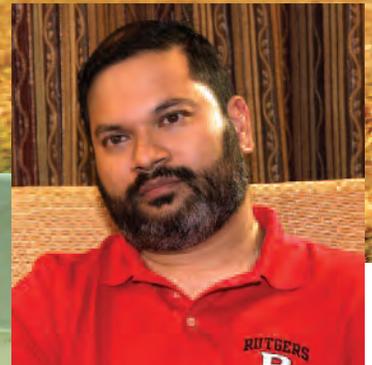
After returning to New Jersey, Dr. Aziz and his wife, Anita Puran, PhD, cofounded Smile Bangladesh to serve those remote communities. Dr. Puran, who earned her doctorate in public administration at Rutgers University, serves as the organization's executive director.



Year-round recruitment assembles a multinational, multi-institutional, multidisciplinary core team for each mission: dental and plastic surgeons, anesthetists, and nurses, most of whom have several years' experience with the group. Their efforts culminate in twice-a-year cleft repair missions, led by Dr. Aziz and Ms. Rozario, who now serves as an administrative assistant in the Office of Global Health at the medical school. Gregory Borah, MD, professor of surgery

PHOTOS BY CHRISTINA ROZARIO

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Shahid Aziz, MD, DDS, DMD (inset, above), associate professor of oral and maxillofacial surgery and plastic and reconstructive surgery, Rutgers School of Dental Medicine and Rutgers New Jersey Medical School, had

already been on several cleft repair missions to South America when he learned of the vast need for his specialty in Bangladesh. • Gregory Borah, MD (center in photo above left), professor of surgery and chief, division of plastic surgery, accompanies the Smile Bangladesh team on one mission each year. He performs cleft lip repairs, while Dr. Aziz concentrates on palates.



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For each mission, Dr. Aziz has recruited two or three residents from the oral and maxillofacial surgery program at Rutgers School of Dental Medicine. In addition, Dr. Borah takes along a resident from the plastic surgery program at University Hospital. “I want to open their eyes to the fact that surgery becomes philanthropy when you provide first-world medical care in a third-world country,” Dr. Borah says. “I tell them: ‘You have the brain and the hands, and when you have the skills, you can spend time giving back wherever you are.’”

Smile Bangladesh has also widened the horizons of its patients and their families. “Many of these children have never seen people from beyond the borders of their villages,” says Dr. Borah. “They are visibly struck by the diversity among members of our team, as we work alongside native Bangladeshis.” Building trust can take a little time, he adds, but when the trust comes, it is total, contributing to the smiles that will follow.

## *Word of Mouth:* *Collaboration, Communication, and Education*

**The** developmental causes of cleft anomalies are not completely understood. Every embryo starts out with a cleft that runs from the upper lip to the back of the soft palate. The cleft should fuse during the first trimester of gestation, but in some cases, the pathways of fusion are interrupted by factors that might include, individually or in combination, genetics and the mother’s health, nutrition, and environment.

In Bangladesh and many other parts of the world, cleft anomalies tend to be shrouded in superstition and carry a harsh social stigma. Children disfigured by facial clefts are likely to be socially ostracized, affecting their ability to become educated, develop friendships, and, as adults, to marry and become employed.

In addition to creating social barriers, the deformity can present a wide range of health problems, many of them profound. Babies with cleft palates often have difficulty

nursing and require special feeding techniques; respiratory problems are common. Cleft lips and palates can also lead to hearing loss, dental abnormalities, and impaired speech, so the earlier the repair can occur—preferably between the ages of 3 and 18 months—the better a child’s chance of developing normally.

While other medical missions come to Bangladesh to repair clefts, most do their work in the cities. “We go where the need is greatest, to the remote areas where chil-

dren don’t have access to medical care,” says Dr. Borah.

One of the program’s greatest challenges is to reach families in these remote areas, to educate them about the clefts and recruit patients for surgery. Many parents are unaware that their children’s deformities can be corrected. Therefore, the work of Smile Bangladesh begins with enlightenment: to tell rural communities about the arrival of the Smile program, inform people that clefts can be repaired—often quite easily, especially in the case of cleft lips—and support the mothers, who are commonly condemned as having caused the cleft. “Many learn by word of mouth,” says Ms. Rozario. “Children return home transformed, and news spreads to the parents of children who need surgery. When we return to areas we have already visited, our numbers double.”



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## Imtiaz At

his family’s home in Bangladesh, 2-year-old Imtiaz enjoys a visit with Christina Rozario, administrative assistant, Office of Global Health, Rutgers Robert Wood Johnson Medical School.

The previous day, his cleft lip had been repaired by a team from Smile Bangladesh.

Imtiaz’s four-member family lives in a small tin hut. Like many homes in rural Bangladesh, it is at constant risk of blowing away in a coastal storm or being washed downriver in a monsoon. There is no sanitation or running water. Without outreach from Smile Bangladesh, Imtiaz’s parents might never have known that his lip could be repaired; certainly, they could not have afforded the surgery that would give him his new smile.

“I held Imtiaz in my arms and said to myself, ‘This is a very good reason for Smile Bangladesh to continue,’” says Ms. Rozario.

## Global Connectivity

**Ms.** Rozario spends a week in Bangladesh before and after each two-week mission, working with the medical teams, reaching out to patients and their families, and coordinating logistics to provide everything the surgical teams need to work straight through 12- to-14-hour days.

Ms. Rozario’s extensive experience working with Bangladeshi nonprofits has been key to the growth and outreach of Smile Bangladesh. Local partners have spurred patient recruitment, distributing pamphlets and brochures to remote communities to link Smile Bangladesh with the families of children with cleft deformities.

Through these partnerships, Smile Bangladesh has solidified relationships with independent (non-government-run) hospitals, where the “surgery camps” take place. Now, with nonprofit partners serving as the liaison, rural hospitals have replaced hospital boats. They provide not only space for three operating theaters but also intravenous fluids and antibiotics to supplement the equipment brought in by Smile Bangladesh. Moreover, Bangladeshi medical teams are involved with the cleft repair process from start to finish, beginning with patient screening and selection, and with pre-surgery blood work and X-rays. And local surgeons continue to receive training from Smile Bangladesh specialists.

“We are becoming one world, one economy, globally connected,” says Dr. Borah. “The distinction between haves and have-nots is growing greater everywhere. Still, in one afternoon, you can change a life. And in two weeks, you can make a really big difference.” **M**