



Geisel researchers Alka Dev (far left) and Dr. Peter Wright (third from left) confer with Haitian pediatricians Dr. Michelucia Casseus (left) and Dr. Wilhermine Jean Baptiste (right).

FINDING HOPE FOR NEWBORNS IN HAITI

SARAH ZOBEL

HAITI, A BEAUTIFUL, MOUNTAINOUS ISLAND COUNTRY, OFTEN SEEMS LIKE A MAGNET FOR MISFORTUNE. Extreme poverty, infectious diseases, and catastrophic natural disasters, such as hurricanes and earthquakes, routinely thwart economic progress and advances in public health. But Peter Wright, MD, (Med '65), and Alka Dev, DrPH, are hopeful about Haiti's future, specifically its newest and youngest citizens and their mothers.

“We don’t stop working just because there’s a hurricane...”

With funding from the W.K. Kellogg Foundation and the Children's Prize—a highly competitive international grant—Wright and Dev are leading a project to improve prenatal and newborn care in Haiti's southern region. Wright, a professor of pediatrics at the Geisel School of Medicine and a physician at the Children's Hospital at Dartmouth-Hitchcock, also leads the Dartmouth-Haiti Partnership, which engages Dartmouth students and faculty with initiatives in Haiti. Dev, a research associate in pediatrics, came to Dartmouth after spending time in Rwanda completing her dissertation on stillbirths and neonatal survival.

Working with their Haitian colleagues, Wright and Dev will train local medical

professionals and assistants and help establish a special nursery to care for newborns who need resuscitation at birth and respiratory support. The initiative will make use of recent innovations and technology focused on improving neonatal survival in low-resource settings, such as the Helping Babies Breathe suite of programs developed by the American Academy of Pediatrics and the Pumani bubble continuous positive airway pressure (bCPAP) device, a low-cost respiratory device for newborns and children. The nursery will be based at Hôpital Immaculée Conception (HIC) in Les Cayes, Haiti.

“Because Immaculée Conception is a referral hospital it tends to get more of the complicated deliveries—more of everything

from the southern region because the catchment area is so big,” says Dev. The majority of Haitian women—especially in the rural areas that comprise the south—deliver at home, with traditional birth attendants, who may or may not have had medical training. While many deliveries can be managed this way, some women need more specialized or emergency care.

COMPLEX PICTURE

Good prenatal care for women in Haiti’s rural south is also essential.

“They need to have their blood pressure checked, be tested for syphilis and HIV, get a tetanus vaccine—a number of things that are pretty low cost and fairly easy to do, and are not being done regularly even at the small clinics that are in the community,” says Dev. Good prenatal care also includes access to nutritious food, something Dev and Wright hope to address through a community gardening project that will enable women to grow healthy foods themselves and consume them on site.

“We recognize that if you give a woman some oil and rice and meat, she may feed it all to her family. So we also want to find ways that we can make sure that she’s getting this really good, healthy meal, too,” says Dev.

That’s an important component of the complex picture of health, adds Wright.

“We normally think of ‘global health’ as international health, but it’s a concept that means not only physical health, but also jobs, housing, adequate food, water, irrigation, and so forth,” he says. Wright attributes that use of the term to Jean Pape, MD, founder and director of GHESKIO, an organization that has been providing medical care to Haitians since 1982.

Wright, who has worked with GHESKIO for decades, first traveled to Haiti in 1974, near the end of his pediatric infectious disease fellowship. Although he arrived as a general pediatrician, the bulk of the care he provided was in infectious diseases. During subsequent visits he saw patients with increasingly familiar health issues: diarrhea in both children and adults, rehydration concerns, and HIV, including mother-to-child transmission

and pediatric HIV. Through an HIV treatment project funded by PEPFAR (President’s Emergency Plan for AIDS Relief), Wright got to know the Haitian rural south and its unique development concerns. For the past two years, he has worked relentlessly to identify the team and funding to realize this most-recent initiative.

“We want to establish models for how you can deliver maternal-infant care, particularly around pregnancy and delivery, models that can then be replicated in other places in Haiti. That’s our aspiration,” he says.

HOME TURF

Although Dartmouth faculty and medical professionals will play an important role—traveling to Les Cayes to help with training in technology and effective communication in the delivery room, for example—Haitians will be in charge on their home turf. Two Haitian pediatricians traveled to Dartmouth-Hitchcock Medical Center in February for a month-long training in neonatology and quality improvement. Their visit included daily rounds in the intensive care nursery and valuable one-on-one time with Drs. George Little and Tyler Hartman. (Little, an active emeritus professor of pediatrics and neonatologist, helped lead the international Helping Babies Breathe initiative.) Back home, the

Haitians will rotate through a couple of established neonatal wards elsewhere in Haiti before running the specialized nursery at HIC, since as of now, says Dev, there are no trained neonatologists at the facility.

Recently, UNICEF and HIC’s Director, Dr. Yves Domerçant, agreed to renovate a section of the pediatric ward at the hospital to create the nursery based on designs by Jack Wilson, a lecturer at the Thayer School of Engineering. The renovation will improve the wiring and plumbing capacity for the entire hospital, which sustained significant damage during Hurricane Matthew in October 2016. Wright and Dev, who had been scheduled to visit then, postponed their travel and listened to reports that the hospital had flooded, the roof was blown off, and towns along the southern coast were devastated. Yet locals expressed resiliency, recall Dev and Wright.

“They said, ‘We don’t stop working just because there’s a hurricane, but now the need is even bigger so our response has to match it,’” recalls Dev. In that attitude, Dev and Wright find plenty of hope for Haiti’s future.

The maternity ward at the Hôpital Immaculée Conception in Haiti. (Photo courtesy of Alka Dev)

