



Nab Dasgupta— *Saving lives while giving back to North Carolina*

PHOTO BY LINDA KASTLEMAN

Nab Dasgupta (right) shows his overdose prevention kit to adviser Dr. Steve Marshall.

Project Lazarus may be a work in progress, but all the progress has been in the right direction. The organization, which aims to educate about and prevent prescription drug overdose, has developed in less than five years from an effort in one rural North Carolina county to a program that now influences overdose prevention efforts in every county in the state.

On the surface, the line of success seems fairly straight; in fact, it was anything *but*. It might not have happened at all except for a series of serendipitous events – sage admonishment from a mentor at a major pharmaceutical company, the chance finding of a roommate on Craigslist, a meeting with a determined Wilkes County chaplain. Partnering with

the county medical examiner, a variety of law enforcement officers and first responders was also pivotal. So were endorsements from the North Carolina Medical Board and The White House.

“Actually it all started with bioterrorism,” says Nabarun “Nab” Dasgupta, an epidemiology doctoral candidate at the Gillings School

of Global Health at the University of North Carolina at Chapel Hill.

That was back in 2002, when ample amounts of federal money suddenly were being dedicated to fighting terrorism. Dasgupta was searching for a summer internship while at Yale University for a master’s degree in public health. Government agents wondered if he’d be interested in joining a team that would prepare for a bioterrorist attack – in Wyoming.

“To be honest, I didn’t think Wyoming was a real target for bioterrorism,” he says. “So I started to look for a place where I could make a more immediate impact.”

Dasgupta was interested particularly in how information from informal sources could be used in conjunction with traditional public health surveillance to develop more robust drug safety treatments and solutions. Pharmaceutical company Purdue Pharma presented him with an intriguing opportunity.

“[Purdue] had learned that their drug OxyContin increasingly was being abused, and they wanted to establish a team that would generate strategies and solutions to address this,” Dasgupta says. “This seemed more like what I was looking for.”

After completing his master’s thesis research – interviewing drug users and dealers in his home state of Maine as part of a Yale research study – he was hired by Purdue Pharma to lead their epidemiology efforts. The work was fascinating. Dasgupta became immersed in studying the effects of OxyContin and other opioid drugs. The group aspired

went to great private schools, but attending a public university involves something different. The people of North Carolina are giving up resources and opportunities just to educate you. Your tuition does not repay that debt. It is your responsibility to find ways to give back to that state.’ To be honest, I never thought of my education in this way, but I really took it to heart, and when I got to Chapel Hill, I was determined to do just that.”

However, before starting the doctoral program, Dasgupta needed a place to live and a roommate in Chapel Hill – which meant a search on Craigslist.

Also looking for a roommate on Craigslist was Rachel Fesperman, an MD/MPH student at UNC. After a brief phone call, she and Dasgupta decided to share a house together. It wasn’t long before Fesperman, who grew up in Wilkesboro, N.C., invited Dasgupta to visit her hometown, meet her family and go to MerleFest, an annual music festival in Wilkes County founded by famed songwriter Doc Watson. Dasgupta was game.

“I wasn’t from around here, and this seemed like a great opportunity to see more of North Carolina and its culture,” Dasgupta says. “Being an epidemiologist, I immediately went



Overdoses involving prescription painkillers are at epidemic levels and now kill more Americans than heroin and cocaine combined. The great majority [perhaps 70 percent or more] are unintentional deaths. States, health insurers, health care providers and individuals have critical roles to play in the national effort to stop this epidemic of overdoses while we protect patients who need prescriptions to control pain.

—Thomas Frieden, MD, MPH
Director, U.S. Centers for Disease
Control and Prevention (CDC)

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tinyurl.com/cdc-on-overdoses.

to provide improved physician and patient training and information, to combat addiction and remediate overdoses when they did occur. Dasgupta also learned about an antidote that was highly effective in overdose emergencies.

“If administered in time, naloxone [the antidote] reverses the effects of most opioid overdoses,” he says. “It is also relatively safe. For instance, if an overdose is suspected but in reality hasn’t happened, administering naloxone won’t harm the patient.”

The group worked hard for almost four years on the problem. However, soon after the drug went off patent and received generic status, the company decided to disband the group. Looking for that next step in his career, Dasgupta began applying to doctoral programs. When he was accepted at UNC, a senior member of his group, Dr. Curtis Wright, took him aside.

“Dr. Wright had spent much of his career in the Navy and the Food and Drug Administration,” Dasgupta says. “He told me, ‘Nab, you



A community coalition of physicians, clinic managers, epidemiologists, members of the faith community and others meet at the Wilkes County (N.C.) health department to discuss Project Lazarus.

online to see what kind of public health data I could find out about Wilkesboro. What I learned pretty quickly was that Wilkes County had a drug overdose death rate of nearly 47 deaths per 100,000 people. That was extremely high.”

It was actually the highest rate in the state. Dasgupta met Rachel’s father, Dr. Joe Fesperman, a local physician, and asked if the data on overdoses were accurate. Dr. Fesperman confirmed the figures and said that most of the overdoses were linked to prescription drugs.

“‘Unintentional injury and poisoning’ is the number-one source of death in the U.S. for people under 45 years of age, and overdose is the biggest source of death within that very broad group,” says Steve Marshall, PhD, professor of epidemiology at the Gillings School

Substance Abuse Task Force and hospice to try to reverse the trend.

Fresh off an internship through which he wrote opioid addiction treatment guidelines at the World Health Organization, Dasgupta met with Brason and convinced the chaplain this would take a much broader approach. They called their effort “Project Lazarus” and began expanding, quickly joining forces with the Northwest Community Care Network (the local Medicaid authority). They met with Susan Albert, MD, the Wilkes County medical director, as well as the county sheriff, representatives from other first responders and local social workers.

“My previous experience really helped inform the process,” Dasgupta says. “I knew we had to get buy-in from all these groups

and prevent overdose. It was a great solution because it gave everyone in the group ownership of the material. Every page had meaning for them,” Dasgupta says.

The group members also decided to develop their own emergency overdose tool kit, complete with naloxone and directions for treatment and resuscitation. The kit would be accompanied by comprehensive training on how to spot overdose symptoms – they weren’t always apparent – and how to respond and administer naloxone.

“We wanted to give these kits to all first responders and any patients who thought they may have need of one. However, the kits required a doctor’s prescription, and the local physicians were hesitant about our efforts.”

Dasgupta and his colleagues decided to approach the North Carolina Medical Board directly and ask for an official endorsement of their new strategy, something that was widely considered a long shot.

“We were a very new, small community group,” Dasgupta remembers. “I was confident in our methods and our data, but we knew this wasn’t going to be easy. They really grilled us, too. But by the end of our presentation we had completely won them over.”

As a result, the medical board issued a statement of support that read, in part:

The prevention of drug overdoses is consistent with the Board’s statutory mission to protect the people of North Carolina. The Board therefore encourages its licensees to cooperate with programs like Project Lazarus in their efforts to make naloxone available to persons at risk of suffering opioid drug overdose.

After that, Project Lazarus received support from local physicians. Grants from public health and drug policy foundations allowed Project Lazarus to issue a free overdose kit to anyone in Wilkes County.

“There was no procedure for treating overdose with naloxone prior to Project Lazarus,” says medical director Albert, “except as it occurred in the ambulance or emergency department. We now have naloxone in the homes of people who are determined to be at increased risk of overdose.”

Within two years, the overdose death rate in Wilkes County dropped from 46.6 per



Nab Dasgupta (left) assembles overdose prevention kits in Wilkes County, N.C.

and director of the UNC Injury Prevention Research Center. “Prescribing of opiate-based medicines has skyrocketed, and with it, the number of deaths from overdose. Some of this is chronic abuse, such as people who take pills to get high and take too much. But a lot of it is people with chronic pain who become addicted to painkillers, or even just kids who experiment with other people’s medicines when no one is watching.”

When Dasgupta asked if there were any efforts underway to stem the problem, Dr. Fesperman said that a local hospice chaplain, Fred Brason, had been working with a

and the medical community, and I knew we had to find the reasons current efforts were falling short.”

Dr. Albert says the project was a medical intervention from the beginning. “Nab introduced Project Lazarus, and it really expanded our focus on the community.”

It quickly became clear that most of the participants who try to identify and treat these drug overdoses found the available literature on overdose prevention and treatment too clinical and generic.

“So we worked with them to create their own guide on how to manage chronic pain

100,000 (2009) to 29.0 per 100,000 (2011). Project Lazarus also worked with representatives at Fort Bragg, N.C., to set up a similar project, called Operation OpioidSafe. The success of Project Lazarus has drawn the interest of community health organizations and educators throughout the state.

“Community Care of North Carolina has picked up our program. The blueprint has gone to the public health officials in every county in the state,” Dasgupta says. “While each county presents unique challenges, the process can be adapted to meet their needs.”

The staff of Project Lazarus has helped set up similar programs in California, Maine, Ohio, Oklahoma and New Mexico. Last August, The White House called, asking if Gil Kerlikowske, director of the Office of National Drug Control Policy (also known as the Obama administration’s “drug czar”), could visit Project Lazarus.

During his trip to Wilkes County, Kerlikowske told a packed room, “Project Lazarus is an exceptional organization – not only because it saves lives in Wilkes County, but also because it sets a pioneering example in community-based public health for the rest of the country.”

“There is a new wave of epidemiology,” says Marshall, who is also chair of Dasgupta’s dissertation committee. “I call it ‘intervention epidemiology’ – in which the epidemiologist is not someone who simply quantifies risk factors and then moves onto the next disease, but



Dasgupta presents the Project Lazarus “Naloxone Rescue Kit,” which he hopes will save lives.

rather is someone who is actively engaged with developing and testing innovative solutions to the health problems of our age. This new scholar has broad skills. She can talk health behavior theory and interrupted time series analysis in the same sentence, and in language that anyone can understand. He doesn’t just study health problems; he studies solutions. In fact, the scholar is *part* of the solution. Nab personifies the type of epidemiologist that is desperately needed in the 21st century.”

Dasgupta is slated to defend his dissertation in summer 2013. Once he earns the doctorate, he’d like to pursue other interests

in epidemiology, but he says he will remain involved in Project Lazarus. As for whether he has honored Dr. Curtis Wright’s plea to give back to the people of North Carolina, Dasgupta is philosophical.

“I think Dr. Wright’s words helped me to see the history and sacrifice behind UNC as an institution, that so many folks over generations in North Carolina have put their taxes and physical selves into making this a great school, of which I am the beneficiary,” Dasgupta says. “The best I can do is use what I have learned here to help repay that debt to them and their descendants.”

—David Pesci



More information

CAN BE FOUND AT
{ www.projectlazarus.org }

A 20-minute video describes the work of the Project Lazarus team. (See <http://tinyurl.com/lazarus-video>.)



NOTE: On April 9, the Good Samaritan and Naloxone bill (SB20) was signed into law in North Carolina. The public health bill to prevent overdose deaths, which passed with nearly unanimous support, cited Project Lazarus as a model. Read more at projectlazarusnc.tumblr.com.

In the Christian Bible, St. Lazarus was resurrected by Jesus Christ after having been dead for four days. The name Lazarus means “God is my help.”