




Youthful **VISION**

BY MICHAEL BLANDING | PHOTOGRAPHY KATHLEEN DOOHER



WITH
RELENTLESS
OPTIMISM
HARD-WON
FROM A
TUMULTUOUS
UPBRINGING,

Jennifer Kamara '12

IS HELPING
IMPROVE
HEALTH
AROUND
THE WORLD,
ONE CLINIC
AT A TIME.

“I am so grateful that I lived that life because now I appreciate things so much more.”

The masked men burst into Jennifer Kamara's Sierra Leone home, brandishing AK-47s. The seven-year-old watched them train their weapons, first on her and then on her mother, all the while demanding that her parents give them all their money or be shot.

“No, don't do it,” yelled their commander. “He is the doctor in the community.” The men took everything, including the family's car, but left them alive. They chose not to kill a doctor, a rarity in a country with just one doctor for every 60,000 people.

Growing up in the midst of a brutal civil war, Kamara saw bodies in the street with arms hacked off, and woke up to bullet holes in the walls of her home. But it was the words of that rebel commander that stayed with her. “They had been doing all of these terrible things, but they chose not to do that to us because of the impact my dad had,” she says. “I was deeply influenced by that.”

Now 24, Kamara has taken a circuitous journey in her father's footsteps, leaving her war-torn homeland to study chemical engineering at WPI, and then returning to Sierra Leone last year to set up a health clinic and train doctors through her own nonprofit World Health Equity. She stayed during the summer despite the raging Ebola epidemic that has claimed more than 10,000 lives—and for one terrifying moment seemed likely to take hers as well.

Kamara brushes off hardship with a shy smile. “It was cool growing up like that,” she insists over coffee at a café in Cambridge.

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That combination of optimism and quiet determination has led Kamara to make a big difference in the world, just a few years after graduation. “You can't say no to her,” says David Sengeh, a postdoctoral student at the MIT Media Lab and a board member of her nonprofit. “And that's because you don't want to. She finds the resources she needs and makes the plan to put them together.”

HOPES AND DREAMS

Half Ukrainian (on her mother's side), Kamara was born in that country, where her parents met while her father was studying surgery. The couple settled in her father's Sierra Leone, and he established a clinic in the poor community where Kamara was to spend her childhood living without electricity or running water. Still, when she recalls those years, it isn't the deprivation she remembers.

The family lived above her father's clinic, and she regularly came down to assist him and meet her neighbors, whom she came to know as individuals rather than nameless victims of poverty. “I was able to see them as people with the same hopes and dreams as everyone else, and not look down on them,” she says.

When she received a scholarship to study at an affluent high school, she saw a completely different world, one in which her classmates were vacationing in Europe while she was at

home studying, by candlelight, photocopies from textbooks she couldn't afford. Living between those two worlds gave her a unique perspective—showing her the need that existed, and the resources available to fill that need.

When it came time for her to go to college, Kamara was determined to follow an older brother to the United States; she chose WPI after searching online for colleges at an Internet café and finding that WPI accepted a high proportion of international students and offered scholarships (she received one). Having always been interested in science, she chose to study chemical engineering.

Not that the shift was easy.

“My third week of cell bio class with Professor David Adams, everyone was taking a test,” she says, “and I was like, ‘what is everyone doing?’” She didn't realize the test was posted online, so she failed to take it. When she went to Adams in tears, he told her that if she received an A or B on the next two tests, he'd waive the one she missed (she aced them both). “I don't think I would have had that personalized attention at a larger school,” she says.

COMPASSION TO ACTION

For her MQP, Kamara worked with a team of students in Costa Rica that helped a local community develop a plan for a sustainable water supply. Her advisor, Jennifer Rudolph, professor of Asian history, says Kamara was particularly adept at working collaboratively within the group to develop solid plans. “She had a level of maturity and life experience that is rare for an undergraduate,” Rudolph says. But just as clearly, she remembers Kamara's compassion for the poor people in the local community, who, Kamara says, reminded her of the people she grew up with in Sierra Leone.

That compassion turned to action after she graduated in 2012. Deciding she wanted to pursue medicine like her father, she began work at Novartis doing oncology research.



Meanwhile, back in Sierra Leone, her father was lamenting the difficulty of treating patients in the Bamoi community, a tribe of 25,000 people north of the capital Freetown. People there lived in mud huts, 10 to a home, a two-hour drive over dirt roads from the nearest hospital.

Vowing to help, Kamara contacted an aid organization in Sierra Leone for assistance in setting up a pilot clinic in the community. “They didn’t have the resources,” she says, squinting her eyes earnestly, “but I couldn’t let it go.” She contacted the Ministry of Health in Sierra Leone, as well as Novartis, to ask for funding, but she kept hearing excuses. “Either I was too young, or I didn’t have the money, or I wasn’t a doctor.”

Undeterred, Kamara began setting aside a portion of her own paycheck to fund a clinic, which her father visited once a month. “My

mom thought I was crazy. She said, ‘You don’t have any money yourself and you are sending your money away,’” says Kamara. “But how could you not? Twenty dollars is a bag of rice for a family for an entire month. If I send 200 dollars, that could make a huge impact in their lives.” Nurses at the fledgling clinic collected data in a notebook on cases of malnutrition, cholera, and malaria. In one year, the clinic was able to serve 2,500 patients—a tenth of the population—and cut down malaria in the region by 20 percent.

With that data in hand, Kamara applied for nonprofit status in order to raise more funds for a permanent clinic. She called her new organization World Health Equity, and recruited two other WPI alums, Michaella Reif ’14 and Margaret Hester ’14, who were inspired to join Kamara after hearing her speak on

campus. “The biggest impression I got from Jennifer is that she is absolutely fearless,” says Hester, “but not in an aggressive way. There is this absolute positivity that radiates from her. Even if you are not experienced, she says to give it a go.”

Kamara put her own words into action, calling upon everyone she knew in order to raise \$25,000 to start construction on the clinic. When complete, it will have four beds, a consultation room, and its own generator to power a refrigerator to store medicines. “Our goal is to have it up by the summer of 2016,” she says, her face lighting up at the thought. The Ministry of Health has agreed to staff it with health workers, and Kamara hopes a medical resident can rotate through the clinic to care for patients, along with a nurse and a midwife.



BABY BOX PROGRAM

The United States lags behind other wealthy nations on infant mortality. Following the example of Finland, which has the lowest infant mortality rate in the world due, in part, to the implementation of its Baby Box program, WHE is partnering with Project Hope and the Baby Box Company to implement its own program in Massachusetts. Providing essential items for the care of a newborn to disadvantaged parents, the Baby Box can be filled with clothes, diapers, lotion, and other essentials, and once emptied, can serve for a while as a crib. You can help by making contributing via Paypal:

- \$5 brand new pacifier
- \$10 brand new baby bottles
- \$20 box and mattress (vital components)
- \$30 pack of diapers
- \$100 entire baby box complete with accompanying items

TO DONATE, visit worldhealthequity.org

Fresh off that success, Kamara looked for a larger way to make a difference in a country with the second highest infant mortality rate and the highest maternal mortality rate in the world. Hearing about a program in Kenya that helped cut down on deaths of mothers in childbirth, she cold-called the head of the program to talk about techniques.

In developed countries, postpartum hemorrhage is stopped using an apparatus called a Bakri Balloon, which inflates inside the uterus to apply pressure like a Band-Aid. At several hundred dollars each, however, the cost is prohibitive in sub-Saharan Africa. The solution in Kenya was to create a simple substitute with a condom and a catheter to inflate it—at the cost of only a few dollars.

By this time, Kamara had left Novartis to work as a consultant on world health issues at Massachusetts General Hospital. With the help of MGH staff, she was able to set up a similar program in 50 clinics in Freetown, traveling there in January to train workers. Officials at Sierra Leone's Ministry of Health were so pleased, they asked her to come back in May to train workers at 50 more clinics. Kamara proudly notes that so far the procedure has been used successfully on 40 women who suffered postpartum hemorrhage, drastically reducing complications in births.

Kamara was so passionate about implementing the program that she hardly gave it a second thought when the Ebola epidemic swept through the country last spring. "I wasn't really worried for myself, since I wasn't touching blood or patients, but I was worried about the doctors we were working with," she says. Nevertheless, one day as she was performing trainings, she felt suddenly feverish and weak.

Though Kamara had had malaria as a child, this felt much worse. She sequestered herself at her father's house, waiting for two agonizing days for the results of the test. "The worst part of it was feeling isolated," she says. "It was scary

to think about potentially dying alone." The test came back with good news. "I was like, 'I had malaria, thank God!'" Kamara says, throwing up her hands in memory of the joy she felt.

Characteristically, the experience motivated her even more to help others. "It gave me a further understanding of the disease, and just how terrible it is for people to feel so alone," she says. As the epidemic spread, Kamara's organization began raising funds for protective equipment against Ebola, which has claimed the lives of 60 health workers to date. Working with the disaster aid organization World Vision, WHE was able to supply all 100 of its partner clinics with the equipment, and train health workers how to use it.

Kamara's ability to identify a need and then quickly take measures to fill it has allowed her to make a substantial impact in Sierra Leone in just a short time. But she harbors bigger dreams for her organization. Already, WHE has branched out to work in the United States, where it is distributing "Baby Boxes" full of needed supplies to disadvantaged mothers in Massachusetts.

Eventually, Kamara hopes to make World Health Equity truly global in addressing health access issues in other countries, perhaps including her native Ukraine. To bring her work to the next level, she is taking on a new position in New York City as a strategy consultant for Huron Consulting Group. "I've already changed careers three times in three years out of school," she laughs. She is hoping the new position will give her a firmer basis in business strategy to help make her organization more effective and sustainable.

"I am just going to take it one project at a time, and make an impact wherever I can," she says. "I know I will not be able to change the world, but if I can make a meaningful, and definite, and sustainable impact, then I will be happy." J