DOOR TO DOOR
ICAP CAMPAIGN IN AFRICA BRINGS HIV TESTING HOME

BY PETER TABACK

Knock on a stranger’s door. Offer a warm smile and a freshly baked pie and there’s a good chance you’ll be invited inside. Explain that you have run over the family pet and you’ll probably get a far cooler reception.

And if you ask to test the whole family for HIV . . . what then?

The answer is beginning to emerge from the first three sub-Saharan nations participating in the Population-based HIV Impact Assessment (PHIA) Project, a five-year, $125 million dollar survey funded by the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR). Led by ICAP, the Mailman School’s global HIV/AIDS center, the PHIA Project is deploying more than 1,000 field-workers to knock on doors in 13 countries hardest hit by AIDS to prepare Africa for a new era—one in which access to HIV treatment is radically altering the trajectory of the epidemic.

ICAP is no stranger to the front lines of the war on HIV in Africa. Beginning in 2003, Wafaa El-Sadr, MD, MPH—the Mathilde Krim-amfAR Professor of Global Health and founding director of ICAP—led global efforts to provide antiretroviral treatment for pregnant women and their newborns, a program that marked the first glimmer of hope for the HIV-ravaged continent.

More than a decade later, the magnitude of the epidemic in Africa still strains the imagination. The sub-Saharan region comprises just over 10 percent of the world’s population but 70 percent of those infected with HIV. The nation of South Africa accounts for one-fifth of global HIV infections; in Swaziland and Lesotho, one in four people lives with HIV.

The PHIA Project, conducted in partnership with the U.S. Centers for Disease Control and Prevention (CDC), will illuminate the epidemic in participating countries so that officials can identify and deploy resources to tailor treatment and prevention efforts. “When one thinks about what needs to be done next, it’s daunting,” says El-Sadr. “The countries need this information in order to fine-tune their response in a time of constrained resources.”

Community health worker Anthony Nkole (right) reviews the PHIA Project consent form with prospective survey participants.

PHOTOS BY LAZAROUS NKHUWA
In the U.S. and Western Europe, the epidemic has affected distinct populations, such as men who have sex with men, sex workers, and people who inject drugs. In much of Africa, HIV prevalence is far greater in the general population, a distinction reflected in the design of the PHIA Project.

For years, epidemiologists have used data from prenatal clinics in Africa to project infection rates based on the number of pregnant women who test positive for the virus. But critics contend that such models fail to capture HIV’s effect on the population as a whole. The PHIA Project aims to bridge that gap by collecting nationally representative data on HIV and its risk factors in select countries—Cameroon, Ethiopia, Ivory Coast, Kenya, Lesotho, Malawi, Namibia, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe, and Haiti—and building local capacity to monitor future progress in confronting the epidemic.

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Jessica Justman, MD, the PHIA Project’s principal investigator and senior technical director at ICAP, sees the effort as a turning point in the fight against HIV and has set her sights high. “Prevalence is the percentage of people living with HIV,” says the associate professor of medicine in Epidemiology, “and that number alone doesn’t provide a complete picture.” Accordingly, the PHIA Project is assessing HIV prevalence and the rate of new infections and whether people with HIV have viral load suppression, a measure that would have been discouraging even five years ago.

Because of the increasing access to HIV treatment in PEPFAR-supported countries, researchers expect that higher levels of viral suppression are already being achieved, reducing each individual’s capacity to transmit the virus to others and saving millions of lives. “The ‘e’ in PEPFAR stands for ‘emergency,’” Justman says. “In the early days, it was imperative to roll out treatment and keep people alive. Now that PEPFAR has been in place for more than ten years, it’s important to take the time to understand the state of the epidemic. Without this evidence, neither individual nations nor donors will know what progress is being made or where to focus energies.”

Beth Tippett Barr, DrPH, directs the CDC’s activities in Zimbabwe, one of the high-burden countries the federal agency has vowed to help focus and refine their national HIV programming. The PHIA Project will be critical to achieving that goal, she says. “This survey will provide vital details about the breadth and depth of access to and uptake of HIV services,” says Barr, “to identify under-reached populations, as well as geographical or occupational groups in need of outreach services, and guide the further tailoring of HIV programs to have a more effective reach.”

Designed to roll out sequentially, the PHIA Project hints at the scale of HIV in Africa. By the time the final household visit is completed, the survey will have reached nearly half a million people, with about 15,000 visits in each participating country. Surveys have already been completed in Malawi, Zambia, and Zimbabwe and are underway in Lesotho, Swaziland, Tanzania, and Uganda.

In each country, knocking on the doors of 15,000 households is, relatively speaking, the easy part. Large-scale community outreach began in 2015, with a combination of print and digital media, radio spots, meetings with community leaders, and public events. Rollout follows a meticulous schedule: A few days before household visits begin, teams wearing brightly colored PHIA Project T-shirts distribute posters that introduce the survey’s goals. The day before survey teams make contact, a mobilization team personally alerts every household in selected districts that they may receive a visit. At homes randomly chosen for participation, the assessment team provides extensive information on the PHIA Project and requests consent, first from the head of the household and then from each of the other household members. And before the first drop of blood is drawn, staff meet privately with every consenting adolescent and adult family member to assess their knowledge and attitudes about HIV.

Then the test.

Participants receive test results within minutes after their blood has been drawn. Those who are HIV-positive are also tested on the spot for their T-cell count and referred to nearby clinics for follow-up and to receive antiretroviral therapy if they are not already on treatment. When a child tests positive, survey staff give the results to a parent or guardian and explain the importance of taking the youngster to the nearest clinic as soon as possible. The majority of individuals test negative and receive counseling on strategies to prevent infection.

Despite the gravity of the conversations, popular feedback has been positive. “People like the convenience and privacy,” Justman says. “They don’t have to go to a clinic. They don’t have to wait on line. And they know it’s important.”

Stigma, which slowed the response 35 years ago when HIV emerged, is beginning to subside in Africa. Mobilization teams see the shift firsthand when residents of homes that are not selected ask whether they can take part in the survey, in hopes that something can be done to help people living with HIV under their roofs.
Given the extent of the PHIA Project’s ambition, as well as the challenging geographic terrain and number of regional languages in play, locally recruited mobilization teams are a core feature of the project’s design. Zambian community-health worker Anthony Nkole has years of experience conducting the kind of outreach on which the survey relies.

“After I’ve been welcomed in the house, I explain the survey,” says Nkole, who has already conducted more than 100 interviews. “I say, ‘You are free to ask questions and we’ll discuss them together,’ and it will flow from there. I tell them, ‘This survey will help improve HIV services for all Zambians.’” In more than a year on the job, Nkole says, he’s rarely encountered resistance. “Even in remote areas,” he says, “they’ve heard of HIV, they’ve heard of the survey, and they are glad they were chosen.”

Initial data from Malawi, Zambia, and Zimbabwe are expected late in 2016. Justman is hopeful that analyses will show progress toward the UNAIDS 90-90-90 global targets: 90 percent of all HIV-positive people aware of their infection, 90 percent of those who test positive on treatment, and 90 percent of those on treatment with effectively suppressed viral loads. By contrast, in the U.S., only about 30 percent of all HIV-positive people have effective suppression.

The PHIA Project’s potential is difficult to overstate. Millions of data points are being assembled on the effectiveness of treatment and prevention in 13 countries. A clear picture of the trajectory of each national epidemic will emerge, and planning, especially where incidence rates are higher than expected, will be reinvigorated. And due to the capacity-building efforts at the core of the PHIA Project, in every country, a cadre of public health specialists, survey coordinators, community workers, and lab technicians—all skilled in detailed population monitoring—can be tapped to perform other surveys.

Owen Mugurungi, MD, who directs the AIDS and TB unit within Zimbabwe’s Ministry of Health and Child Care, says the PHIA Project’s data could inform national efforts to eliminate HIV throughout sub-Saharan Africa and beyond. “By making regular HIV testing the norm,” he says, “we can turn the tide against this pandemic.”

HIV has emerged from the shadows. And what may be most important for the millions of people living with HIV in Africa is that open, well-informed conversations about testing, treatment, and prevention are now taking place in thousands upon thousands of households.

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