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HEALTH

How the Response to Zika Failed Millions

Global Health

By DONALD G. McNEIL Jr. JAN. 16, 2017

Almost a year ago, the World Health Organization declared the Zika epidemic a global health emergency, calling for an epic campaign against a virus that few had ever heard of. As it spread to almost every country in the Western Hemisphere, scientists and health officials at every level of government swung into action, trying to understand how the infection caused birth defects and how it could be stopped.

The W.H.O. ended the emergency status in November, but the consequences of the outbreak will be with us for years to come. So maybe now is a good time to ask: How'd we do?

Not so great, according to more than a dozen public health experts who were asked to reflect on the response. The battle was a series of missed opportunities, they said, that damaged still-uncounted numbers of babies across a whole hemisphere.

"Latin America was pretty much left to its own devices," said Lawrence O. Gostin, director of the O'Neill Institute for National and Global Health Law at Georgetown University. "I didn't see the kind of interactive response like the one that brought Ebola under control."

Yet there were some notable successes. The biggest was that travel advisories issued in January kept many pregnant tourists and business travelers from venturing to areas where they might have been infected, with terrible

consequences.

The Rio Olympics went ahead without spreading the virus, and new diagnostic tests for Zika were swiftly designed and deployed. Scientists are moving ahead with multiple vaccine candidates and new ways to fight mosquitoes without pesticides.

But the positives were counterbalanced by many negatives, experts said. They harshly criticized the partisan bickering that delayed a Zika-funding bill in Congress for months, and they decried the failure of every city in the hemisphere — other than Miami — to control mosquitoes.

Most praised the W.H.O. for declaring an emergency on Feb. 1, but also condemned as premature its decision to end it on Nov. 18.

But the greatest failure, all agreed, was that while tourists were warned away from epidemic areas, tens of millions of women living in them — many of them poor slum dwellers — were left unprotected.

As a result, a wave of brain-damaged babies is now being born. Their families are already suffering, and their medical care will eventually cost hundreds of millions of dollars.

The failure to advise women to postpone pregnancy, if they could, until the epidemic passed "was the single greatest travesty of the epidemic," said Amir Attaran, a professor of law and medicine at the University of Ottawa.

It was "hideously racist hypocrisy," he added. "Female American tourists were given the best and safest public health advice, while brown Puerto Rican inhabitants were told something else entirely."

Politics Got in the Way

Impoverished Latin American and Caribbean women were badly served in many ways, other experts said.

Trucks sprayed pesticides that often did not work. Admonitions from on high to wear repellent and long sleeves were given with no studies proving that they could protect indefinitely.

And health authorities, fearful of offending religious conservatives, never seriously discussed abortion as an alternative to having permanently deformed babies — even in countries where abortion is legal.

That reluctance created an unusual gulf between official advice and actual practice. Many gynecologists interviewed said privately that they offered abortions to patients whose ultrasound scans showed abnormally small heads or brain damage.

But they did so without official support or guidance from the W.H.O. or the Centers for Disease Control and Prevention.

During the epidemic, when health officials were asked why they did not advise delaying pregnancy or seeking abortions, they said that to do so would interfere with women's reproductive rights or prevent older women from conceiving in time to have children.

At the W.H.O., Dr. Bruce Aylward, head of the Zika emergency response, called pregnancy "a complicated decision that is different for each individual woman."

Dr. Thomas R. Frieden, director of the C.D.C., said he followed the advice of Dr. Denise J. Jamieson, chief of the agency's women's health and fertility branch, who said it was "not a government doctor's job to tell women what to do with their bodies."

Dr. Gostin said he felt the agencies had been too cautious, out of fear of criticism from women's groups.

"Public health ought to trump that," he said. "Giving women advice is very different from controlling women."

Michael T. Osterholm, director of the University of Minnesota's Center for Infectious Disease Research and Policy, gave a blunter explanation for the shyness from officials.

"The C.D.C. always gets in trouble with Congress when it talks about contraception or bullets," he said. (By the latter, he meant that it was hard for the

officials to point out that gunshots are a major cause of American deaths for fear of offending the gun lobby.)

“And abortion?” he added. “You talk about third rails in politics? Abortion is the fifth rail. They can’t touch it. If the C.D.C. had pushed the envelope any farther, its funding would have been at risk.”

C.D.C. guidance on Zika was “a little coy,” agreed Dr. William Schaffner, chairman of preventive medicine at Vanderbilt University Medical School.

“A recommendation to put off pregnancy until the risk abated should have been front and center — and much more explicit.”

Brazil, by far the hardest-hit country in the epidemic, really let its women down, said Dr. Artur Timerman, president of the medical society for dengue and arbovirus specialists there.

“For religious concerns, we have a lot of restrictions regarding advising women on birth control, so we were very far from giving them correct information,” he said. “I think we will have a lot of women infected yet, as we see lower levels of awareness.”

Missed Opportunities

Experts praised the C.D.C. for its work on developing new Zika tests and getting them to state laboratories quickly. Better antibody tests that identify past infections are still needed.

Most countries did not focus enough on preventing sexual transmission, experts said. Even New York City, which has a respected health department, filled its subways with posters showing big mosquitoes.

Yet not one of the nearly 1,000 cases diagnosed there by year’s end was transmitted by a local mosquito; all were either picked up elsewhere or transmitted sexually.

The number of children damaged by the epidemic is still unknown, but is likely to ultimately run into the tens of thousands across the hemisphere. As of the

end of 2016, the W.H.O. had recorded more than 2,500 cases of Zika-related microcephaly in 29 countries.

Studies suggest that microcephaly — which results in an abnormally small head — represents only a small fraction of the damage done. Babies are being born blind, deaf or with rigid limbs or frequent seizures, and it seems likely that many more will eventually have learning and emotional problems.

The epidemic also showed that most nations remain inept at mosquito control.

“Miami is the one place that responded effectively,” said Duane J. Gubler, an expert in mosquito-borne diseases at the Duke-NUS Medical School in Singapore. “Others were mediocre or poor.”

Miami used both aerial and ground spraying of insecticide and larvicide, along with teams going house-to-house looking for breeding sites.

The Zika scare made pest-control officials and local residents more willing to test new technologies, including releasing male mosquitoes that pass on a life-shortening gene and female mosquitoes carrying bacteria that suppress their ability to transmit viruses.

A Dangerous Disconnect

Experts in Brazil, where the epidemic started, said doctors there acted quickly but were often thwarted by the country’s political and economic chaos — President Dilma Rousseff was ousted in August — or by hesitant foreign scientists.

“Brazil reacted with seriousness and foresight,” said Dr. Albert I. Ko, a Yale epidemiologist who has also worked in Salvador, Brazil, for many years. “The people in the trenches, the city and state public health officials, should be regarded as heroes.”

Both he and Dr. Ernesto T. A. Marques Jr., an infectious disease specialist at the University of Pittsburgh and at the Oswaldo Cruz Foundation in Brazil, said Brazilian scientists felt let down when they looked for outside help — at first from European donors and health agencies.

“The local researchers’ role was mainly to collect samples,” Dr. Marques said bitterly.

The C.D.C.’s initial reluctance to accept Brazilian scientists’ work also slowed the international response, said Dr. Peter J. Hotez, the dean of the National School of Tropical Medicine at Baylor College of Medicine.

Even when the Brazilians found Zika virus in two women’s amniotic fluid and in the brain of a microcephalic fetus, “The C.D.C. would not accept it until they had done it themselves,” he said. “I saw that as hubris.”

The news media, for once, got relatively high marks from the experts — or at least higher marks than it did in the 2014 Ebola epidemic or the 2009 swine flu pandemic.

Three years ago, pictures from Africa showing men in spacesuits carrying dead bodies exaggerated the risk of Ebola to America, they said. By contrast, pictures of tiny-headed babies made Americans take Zika seriously but sensibly.

“In Brazil, the press was the first to sense that something was going on,” said Dr. Karin Nielsen, a pediatrician at the David Geffen Medical School at the University of California, Los Angeles, who also works in Rio. “It was pushing it even before the medical specialists were.”

The North American media, several experts said, did a good job debunking various myths that arose early in the epidemic, such as rumors blaming microcephaly on genetically modified mosquitoes, larvicide in drinking water or vaccines.

In Brazil, those rumors diverted attention for precious weeks, even prompting some cities to stop fighting mosquitoes temporarily.

Experts also felt scientific collaboration often faltered. For example, plans announced in February to gather 5,000 Zika-infected women into one study never materialized.

One big question remains: Will the virus return?

That is unknowable, most experts said, because no studies show how many people are now immune through previous infection.

Some Brazilian cities, including São Paulo, have not had big outbreaks and may be due for one, said Dr. Scott C. Weaver, a virologist at the University of Texas Medical Branch in Galveston who was one of the first to predict that Zika was likely to strike the Americas. So might Bolivia, Paraguay and Uruguay.

More than half of Puerto Rico's population is probably still vulnerable, so Zika may flare up again, as it might anywhere along the Gulf Coast outside Miami.

"And even if Zika's not bad next year," Dr. Weaver said, "without a vaccine, these viruses are going to come and go."

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