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HEALTH

Colombia Is Hit Hard by Zika, but Not by Microcephaly

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BARRANQUILLA, Colombia — This tropical city on the Caribbean coast may hold the answer to one of the deeper mysteries of the Zika epidemic: Why has the world's second-largest outbreak, after Brazil's, produced so few birth defects?

In Brazil, more than 2,000 babies have been born with microcephaly, abnormally small heads and brain damage caused by the Zika virus. In Colombia, officials had predicted there might be as many as 700 such babies by the end of this year. There have been merely 47. #lessdefectsinColombia

The gap has been seen all over the Americas. According to the World Health Organization, the United States has 28 cases — almost all linked to women infected elsewhere. Guatemala has 15, and Martinique has 12.

Had the rest of the Americas been as affected as northeastern Brazil, a tidal wave of microcephaly would be washing over the region. Most experts say that will not happen, but they are at a loss as to why. #lessthanexpectedinAmericas

Discovering what stopped microcephaly in Colombia may help other countries tamp down the epidemic's worst effects.

There are some obvious differences between Colombia's epidemic and Brazil's. The population here is less than a quarter that of Brazil, and almost half of its residents live at higher altitudes, where mosquitoes are rarer.

And Zika circulated silently for much longer in Brazil. The virus arrived there by early 2014, and not in Colombia until late 2015. Having just fought a severe chikungunya epidemic in 2014, Colombia was more ready than Brazil to send forth the anti-mosquito battalions. #Colombiawasready

But all that does not seem sufficient to explain the disparity. Increasingly, there is evidence for two other possibilities.

Pregnant women here, alerted to the tragedy unfolding in Brazil, may have sought abortions in greater numbers, officials say. Others seem to have heeded the government's controversial advice to delay pregnancy altogether.

Dr. Miguel Parra-Saavedra, the director of maternal-fetal medicine at the Cedifetal Clinic in Barranquilla and one of the country's leading high-risk pregnancy specialists, is among the experts who suspect many pregnant women in Colombia, alarmed by news reports, sought ultrasounds and aborted deformed fetuses. #moreabortionssuspected

Some of his own patients have done so.

Dr. Parra-Saavedra heads a study of Zika-related birth defects in cooperation with the Centers for Disease Control and Prevention. In the course of the research thus far, he has diagnosed 13 cases of fetal microcephaly.

Four of the mothers terminated their pregnancies immediately, he said. Another four, and possibly a fifth, sought abortions but were turned down by their health insurance companies. #moreoptionsavailable

Only four patients, Dr. Parra-Saavedra said, deliberately chose to have their babies.

Among those who tried to have an abortion was Zuleima, a 37-year-old mother of two healthy daughters.

When she and her husband Jaime, 47, an unemployed mine-machinery operator, learned that their unborn daughter was microcephalic, they requested what is here called "pregnancy interruption." #howwouldwetakecareofher

Abortion is legal in Colombia to protect a mother's health, and the health ministry considers a severely deformed baby a threat to maternal mental well-being.

But Zuleima — who asked that the couple's surnames not be used because some relatives opposed abortion — was already 31 weeks pregnant.

While the abortion law does not specify which week is too late, her insurer balked, she said, saying it needed time to decide whether to pay for the procedure.

"There were papers and papers to fill out, and the company didn't say no and didn't say yes," she recalled. "They said, 'We'll call you later.'" #delayuntildelivery

"They never did — and then it was too late. I had to have the baby."

She spoke as she nursed her newborn daughter, Milagros. Standing behind her, Dr. William O. Contreras, a neurosurgeon, said in English that Milagros had no frontal lobes and that the connection between her two brain hemispheres was abnormally small.

"When this happens," he said, "there is no intelligence, no coordination, no attention, no initiative, no calculation — and no memories at all." #nohumanconnection

Dr. Fernando Ruiz, Colombia's vice minister for public health, also says that it is "very possible" that abortions lowered the microcephaly rate here.

"Colombia has some of the most progressive laws and regulations in South America," he said in an interview. With gynecologists alert to the threat, he said, many women had ultrasounds early enough to made decisions.

Even a very small increase in the abortion rate could account for a sharp reduction in microcephaly. #betterhealthcaremeanslesshealthproblems

Just 320 legal abortions were officially reported in Colombia in 2011, according to the Guttmacher Institute, a New York-based research organization supporting abortion rights. Yet the institute estimates that there actually were 400,400 abortions each year in Colombia.

In this country, most abortions are not performed in clinics by vacuum aspiration, but are induced by misoprostol, a drug that causes strong contractions, said Dr. Guido Parra Anaya, the director of the Procrear assisted fertility clinic in Barranquilla. #abortionmoreaccessible

Any doctor can prescribe the drug, and none are legally obligated to report it.

Misoprostol also is commonly given out by illegal providers here, according to the Guttmacher Institute. Frequently, women are told to take the pills and go to a hospital when heavy bleeding starts, as if they had had a miscarriage. Colombian hospitals treat an estimated 93,000 women a year for postabortion complications.

In July, Dr. Martha Lucia Ospina, the director of Colombia's National Institutes of Health, reported that fetal deaths reported as miscarriages on death certificates had increased by 8 percent. The numbers have begun returning to normal only recently. #moreintentionalmiscarriages

In Brazil, by contrast, abortion is permitted only in cases of rape or incest or to save the mother's life, and illegal abortions are hard to get because the police, under pressure from evangelical Christians in Brazil's Congress, began cracking down on clandestine clinics a decade ago.

Also, because the microcephaly surge in Brazil appeared with no warning, even women who might have risked illegal abortions had no time to receive ultrasounds. #Brazillackswomenshealthcare

In Colombia, women now normally have three ultrasounds during a pregnancy. The increased screening has made for hard choices.

Microcephaly can also be caused by other viruses or genetic mutations, but the Zika virus causes unprecedented levels of brain damage.

"In my 22 years as an ultrasound physician, I have never seen microcephaly like this," Dr. Parra-Saavedra said. "The heads are much smaller, to a severe degree." #severeissues=severecosts

Although pockets of dead cells that foreshadow microcephaly may appear earlier, fetal heads do not become unmistakably small until early in the third trimester.

Health insurers, financially struggling here, are reluctant to approve late

abortions because they must pay for neonatal intensive care if the child is born alive. #insurancedoesntpaybutfamilydoes

For mothers, the diagnosis is understandably difficult. By the third trimester, fetuses on ultrasounds look much like newborn babies, not like embryos.

The first scans of Kiara Munoz's son, Juan Diego, were normal. By the time his microcephaly was evident, she was in her seventh month and could see his face clearly.

"The gynecologist said I could terminate, and I cried," said Ms. Munoz, who is 18 but looks 15. "It was very hard because the baby was so big. My husband and I decided to keep him. I am hoping for a miracle." #nomiracleformicrocephaly

Colombia's Zika epidemic peaked in February and was declared over in late July. Many women who became pregnant during that time are still due to give birth, so more microcephaly cases may appear.

But they will still be far fewer than originally predicted.

Dr. Ruiz said that based on Brazil's experience, he had expected to see 700 cases of Zika-related microcephaly this year. Now, he expects 100 to 250 at most.

In December, Dr. Ruiz asked women in Colombia to delay pregnancies, and he says he believes many did so, although he cannot prove it yet. #terriblechoices

A drop in the birthrate would indicate that many women heeded the advice, but the national health statistics office takes 18 months to tally up each year's birthrate.

In some Latin American countries, suggestions from health ministers that women delay pregnancy met harsh resistance — both from the Roman Catholic Church and from women's groups complaining that there was too little access to contraception. #abstinenceascontraception

Every week, we'll bring you the latest Zika news along with stories that capture the wonders of nature and the cosmos.

2. Brief Summary:

Zika is most likely down in Colombia due to better access to women's health care.

Local Impact: Zika has recently been found in Miami, which means we could be seeing impacts on births in South Florida within the next year. This could be exacerbated by the amount of Catholic hospitals that would not allow a termination of pregnancy, even in the case of severe birth defects .

National Impact: Zika-related birth defects could lead to an increase in national health insurance costs, as well as a higher amount of children who will need specialized care for their entire lives.

International Impact: South American countries with better health care for women are seeing less babies born with severe birth defects.

3. Bibliography:

McNeil, Donald G., and Symmes Cobb, Julia. "Colombia is Hit Hard by Zika, but Not by Microcephaly." New York Times on the Web Science. 31 Oct. 2016. Web. 01 Nov. 2016.

4. GP Prompt

Section 2, #48: Assess the ability of technology to ensure human happiness in the present century.

Although technology has the ability to make one happy, there can be instances in which it does quite the opposite. Technology has, in past centuries, made our lives easier, healthier, and longer through advancements such as the cotton gin, the car, and the icebox— or refrigerator. One major area in which advancements have been made this century has been in medicine. In the last 100 years, drugs such as penicillin have mitigated the number of deaths from minor infections alone. Furthermore, MRI machines and CAT scans help medical specialists to pinpoint issues and disease in their patients. As for the patients themselves, these machines allow them to manage pain or disease and live longer, healthier lives. However, sometimes technology can force one to face decisions that are not only difficult, but can also cause heartbreak. One such example can be found when considering the Zika outbreak and its effect on pregnant women. As stated in the New York Times, advancements in ultrasounds and other prenatal equipment have allowed women in Colombia to choose whether or not they choose to continue pregnancy, knowing that their child will be born severely disabled and will require an extraordinary amount of expensive care throughout the baby's entire life. One such case was Kiara Munoz who, after seeing the ultrasound of her son, decided to keep him. Now she is hoping for a miracle that will never come.