

Chairman Cummings, Representative Rouda, and other esteemed Members of Congress. I am grateful for your invitation to testify this afternoon.

In the Spring of 1980, I submitted my senior thesis to graduate from Princeton University. I wrote about the importance of psychological factors in identifying the root causes of hypertension. In my research, I found that external circumstances like poor living conditions and lack of control over life choices exacerbated hypertension. One of the major takeaways from that research was that we cannot deny the impact the outside world has on a person's health.

On another spring day, 39 years later, I sit before you all to explain why this remains the case.

I arrived in Miami-Dade County, Florida in 1987 as a National Health Service Corp Scholar to serve the city's underserved population. I have cared for Miami's citizens as a physician in publicly funded health centers across the county: from Opa locka in the North, Liberty City in the center, and to Homestead in the South. The majority of my patients are low income, underserved, and Black or Hispanic.

For many reasons, poor people are-- for better or for worse-- this country's proverbial canary in the coal mine. In the early 80s, we began seeing increases in cases of HIV. By the end of the decade we were practically in the midst of a national emergency. The pattern repeated in substance abuse, obesity, earlier mortality of middle aged men and other health issues. We saw all of this years before in our communities.

Today, I am an Associate Professor in Department of Humanities, Health and Society at Florida International University's Herbert Wertheim College of Medicine and a Fellow of the American College of Physicians. And even now, after thirty years of practice, I still mainly treat people without insurance. And even now, after thirty years of practice, I see us, once again, repeating the same mistakes that caused millions to die before.

Twenty of the warmest years in recorded history have occurred in the last quarter century, with the most recent five years being the hottest. I want to share a story with you that I hope will make real what life is like for a family with small children trying to survive multiple consecutive 100 degree days in a home with two rooms, one window, and no A/C.

My university has a program that provides home health care visits to Miami's underserved communities. It's called the Herbert Wertheim College of Medicine Green Family Foundation NeighborhoodHELP. And it was through that, that my medical students and I arrived at the home of one of our families in Miami's Little Haiti. It was June 2016, and it was hot. When I opened my car door, it was like lifting the lid on a grill that had been left on for too long.

My students were excited to meet the family: a mother and her four kids. The mother met us at the door wearing a white t-shirt and cotton floral skirt. She was a tall, thin woman who looked

younger than her age. She had her hair pulled back into a neat ponytail. And with a smile, she graciously welcomed us into her home.

We stepped through the front door into the living room, where, instead of a couch, there was a double bed with a toddler sleeping quietly. She directed us to some chairs that she'd set out about a foot from the end of the bed, but not quite inside of the kitchen. This is where we would conduct the visit.

As we settled in, I found myself having to take deep breaths in order to fill up my lungs—as if the humidity in the hot air somehow made it heavier, and harder to inhale. That discomfort, however, was short lived because my attention shifted to the fact that I had sweated through my shirt. The visit began, but as we took her history, I was distracted again—trying to keep the ink on my page from smudging as droplets of sweat fell from my forehead.

Despite our efforts, but without A/C or air flow, we could not hide our discomfort. Our host noticed. Without asking, she moved the only fan in the room from the baby, pointed it toward us, and offered us water. We accepted the water, but refused the fan. We could at least understand what was happening; the baby could not. Fortunately, another child brought us a fan from the bedroom for some relief. We said nothing of the heat, continued with the visit and wrapped up 30 minutes later. We thanked the family for hosting us, grateful to be leaving, but with the sad understanding that they could not.

Heat affects mood, increases risk of dehydration and heart attacks, and worsens diseases like chronic obstructive pulmonary disease and asthma.

People who lack air conditioning or spend time outdoors-- like farm and construction workers and student athletes are more exposed and face greater risk. Young children and the elderly suffer the most, because they are less able to regulate their body temperatures. It also makes it harder to focus. New research on college students shows that working in a hot classroom actually impairs their ability to do simple math. Imagine the impact the heat had on that sleeping baby's learning.

Poor people are this country's canary in the coal mine.

I am reminded of my patient, a 70-year-old African American retired service worker with COPD and asthma. She needed an early refill of her asthma medication, and humbly asked me to sign a form that would reduce her electric bill. The allergy season and frequent hot nights started earlier that year and required more medication and nightly use of her air-conditioner. Her limited fixed income could not cover her costs. She literally could not afford to breathe and sleep.

She is not alone. A 2012 Florida state report showed more than 2.6 million Florida children and adults had a history of asthma, and approximately 1.6 million currently had asthma. One in nine African American children, 1:7 Hispanic children and 1:14 white children have asthma.

My patient is typical of other African Americans who are disproportionately impacted by pollution as they are more likely to live within close proximity to waste dumps, coal fired plants, and in counties that violate federal air pollution standards. And, because of a number of structural factors, they are less likely to be protected and informed about these risks.

The toll is not simply educational or economic, it is also psychological. I am thinking now of my patients who are new mothers: Depressed and worried that their babies—exposed to Zika during pregnancy—will not achieve their full potentials. As temperatures rise, mosquitos carrying Zika, Dengue and Chikungunya increase the distance they can travel, and thus the number of people they can infect.

Worsening heat is just one symptom of climate change, and it's already threatening the health and livelihoods of our most vulnerable citizens. In time, it will affect all of us personally, and in ways that we cannot ignore.

In 2016, I stayed silent. Today, it is time for health professionals to speak-up and help our patients understand the risks of a warming world. And we are. According to a survey conducted in 2014 by George Mason University and the National Medical Association—the leading voice for African American physicians in the United States—88 percent of doctors said that climate is relevant to patient care and 61 percent said that climate change is already having moderate to severe effects on their patients.

Last year, the Florida State Medical Association, in collaboration with George Mason University's Medical Society Consortium on Climate and Health, launched the Florida Coalition for Climate Action to improve our climate literacy and help our patients prepare and adapt to their changing environment. We, physicians, are acting because our patients are getting sicker. We are doing what we took an oath to do. But if this is all that is done, it will end in catastrophe.

Let us look at ourselves. Let us look to each other. And let us not repeat the mistakes of history, allowing thousands to die and millions more to suffer, while we wait for more data.

Climate change is killing people today.

And so, I am grateful to be with you all and to bring these stories from the front lines to our nation's capital. I hope that we will make the right choice this time, and take action to make our communities, our cities, and our country healthful places to live and to raise our families for the many generations still to come.

Thank you.