

Speaking out on lead, Flint pediatrician fulfills calling

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When the children of Flint, Mich., were in danger and the people of Flint were ignored, pediatrician Mona Hanna-Attisha, MD, MPH, raised her voice in protest. That is because sometimes, with an activist spirit and the help of scientific evidence, a physician is in the perfect position to give a voice to those who are the most vulnerable.

“As physicians, we have taken an oath to stand up as the healers and the protectors,” Dr. Hanna-Attisha said during a talk at TEDMED in Palm Springs, Calif. “You don’t mess around with kids, and you don’t mess around with lead, and you don’t mess around with pediatricians.”

From Iraq to Flint

The daughter of Iraqi scientists, Dr. Hanna-Attisha was just a toddler when Saddam Hussein assumed the presidency in Iraq. As the country moved toward war with Iran, which would kill more than 1 million people, her parents saw the coming danger.

“They believed in the country that Iraq could have been—diverse, tolerant, modern, free,” she said. “My parents saw and feared the rise of fascism in Iraq ... like they could look ahead and see the country’s slow and bloody spiral into anarchy.”

So Dr. Hanna-Attisha’s parents immigrated to the United States in search of a “peaceful and prosperous place for my brother and I to grow up in search of the American dream,” she said. Dr. Hanna-Attisha’s mother taught English to recent immigrants and her father became an engineer for General Motors (GM) in Flint.

“Together, they provided a better life for their kids,” Dr. Hanna-Attisha said. “For my family, the American dream became a reality.”

Yet Flint's prosperity was not shared by all. "The manufacturing jobs were segregated, so were the schools and the neighborhoods," Dr. Hanna-Attisha noted. "And those plants spewed tons of toxins into the environment poisoning everyone, but especially the poor and the brown."

Decades of disinvestment in Flint spawned other ills, she said. "Unemployment, poverty, racism, decline in unions, violence, population loss and almost every disparity you can think of. Flint is where our inequality problems, our injustice problems, are most striking."

In Flint today, life expectancy is 15 years lower than in a neighboring ZIP code, she said. "This is no one's dream ... but some things haven't changed. People are still running to America. It is still the epitome of prosperity for the entire world."

"There are two Americas," she said. "The America I was lucky enough to grow up in, and the America that I see every day in my clinic."

Too much lead

Projected on the screen was an image of Lily, one of Dr. Hanna-Attisha's patients. "She can say her name, count to 10, catch a ball. She's gorgeous, strong, smart, brave," Dr. Hanna-Attisha said. "Lily was born into a city that was almost bankrupt. Born into a city taken over by state-appointed emergency management and that emergency manager's job was austerity—to save money no matter what it cost."

A half-century relationship between the people of Flint and fresh, pretreated Great Lakes water was severed. Suddenly, water was drawn from the local Flint River and wasn't being treated properly, Dr. Hanna-Attisha said. "It was missing one important ingredient called corrosion control, a no-brainer in the water engineering world."

Flint residents raised their voices and their jugs of brown water, but their complaints were ignored. "For 18 months, the people of Flint were told to relax, that nothing was wrong, while our children, our children like Lily, were drinking contaminated water," Dr. Hanna-Attisha said.

"Mind you," she noted, "we were drinking contaminated water in a city that is literally in the middle of the Great Lakes in the middle of the largest source of fresh water in the world."

So the untreated and corrosive water created a perfect situation for lead, which is a potent, irreversible neurotoxin that affects behavior and cognition. "We know what lead does," Dr. Hanna-Attisha said. "We've known what lead has done for centuries ... and we now know that even the smallest doses and the first increments of exposure can cause tremendous damage."

“There is no safe amount of lead. And it’s not just a Flint problem,” she said. Discussing cities across the nation, she added, “Our country’s most vulnerable children are already burdened with higher rates of lead exposure and every other toxic stress that threatens their future. It’s an environmental and a social injustice.”

Dr. Hanna-Attisha and her team found that the percentage of children with elevated lead levels doubled after the water switch from lake to river. In the areas where the water lead levels were highest, they saw an even greater increase in children’s lead levels.

“When we first stood up with the proof that this corrosive, untreated water was leaking lead into the bodies of children, the state of Michigan tried to discredit me,” she said.

“I was scared, and at times I felt absolutely sick,” she said. “But I also knew we were right. We fought back with science, with hard facts and with evidence and finally ... the house of cards began to fall. And from that moment when we proved that lead was increasingly in the bodies of our children, our focus shifted to tomorrow.”

Fight for children's future

Dr. Hanna-Attisha now leads the Pediatric Public Health Initiative, a collaboration between Michigan State University and Hurley Children’s Hospital. The initiative brings together experts to address the Flint community’s lead exposure and to help the town’s children get healthy and stay healthy.

Through continued research and monitoring, interventions and new tools and resources, the initiative hopes to promote the children’s development. “It is investing in our kids, especially our youngest and most vulnerable,” she said.

“I was born into a family that was already on the move away from something toward something better. Born into a life knowing that there is injustice in the world and knowing the need to always fight for justice,” Dr. Hanna-Attisha said. “And that’s what my babies in Flint are born into, and babies wherever things are bad and their families are desperate for something better. When you are born into a situation stacked against you, you are born a fighter.”

“As physicians, as pediatricians, we know that children are resilient,” she said. “They are growing and they are moving forward every day. But sometimes they need our voice and they need our strength to help them dream of a better tomorrow.”