

The Medical Commencement Archive

Volume 6, 2019



Mona Hanna-Attisha, MD, MPH FAAP

Harvard Medical School
Commencement

Fresh Eyes

Mona Hanna-Attisha, MD, MPH, FAAP is founder and director of the Michigan State University and Hurley Children's Hospital Pediatric Public Health Initiative, an innovative and model public health program in Flint, Michigan. A pediatrician, scientist, activist and author, Dr. Hanna-Attisha has testified twice before the United States Congress, awarded the Freedom of Expression Courage Award by PEN America, and named one of Time magazine's 100 Most Influential People in the World for her role in uncovering the Flint Water Crisis and leading recovery efforts. She has appeared on CNN, MSNBC, BBC and countless other media outlets championing the cause of children in Flint and beyond. She is founding donor of the Flint Child Health and Development Fund (flintkids.org).

Dr. Hanna-Attisha received her bachelor's and Master of Public Health degrees from the University of Michigan and her medical degree from Michigan State University College of Human Medicine (MSU CHM). She completed her residency at Children's Hospital of Michigan in Detroit, where she was chief resident. She is currently an associate professor of pediatrics and human development at MSU CHM.

A 2018 New York Times 100 Notable Book, NPR Science Friday Best Science Book of 2018, and 2019 Michigan Notable Book, Dr. Hanna-Attisha's bestselling and widely acclaimed book *What the Eyes Don't See: A Story of Crisis, Resistance, and Hope in an American City* is a riveting, beautifully rendered account of a shameful disaster that became a tale of activism and hope. It's the story of a city on the ropes that came together to fight for justice, self-determination, and the right to build a better world for their—and all of our—children.

Hello and congratulations, grads!

And congratulations to family, friends and faculty, all of you who are here today sharing in the celebration of this outstanding achievement.

Let's get started. I only have about 15 minutes for this visit, so I'm glad to see you're already wearing gowns.

Just kidding. I don't even have enough lollipops and stickers for all of you. Actually, dentists, I would never give my patients lollipops.

In all seriousness, congratulations! I have been where you are right now. Excited, anxious, nervous and unbelievably happy. I sat and listened to my commencement speakers as you listen to me. I felt the pride that comes with being part of something great.

A lot of you are thinking how amazing it is to be graduating from—let me check my notes—Harvard. Wow, Impressive. Harvard! The name alone will open doors.

But I'll tell you something. It is Harvard that is proud of you and proud of what you will do.

As much as you are wrapped in the history and traditions and the legend of this place, this place only is as great as you are and as great as you will be. And as this university rises on the shoulders of its graduates, this world, our world, depends on the work you will do.

First, let me ask you this: Why did you choose this noble profession? Why did you go to school for what seems like forever?

I hope the answer in every head under those mortarboards is: our patients.

For me, as a pediatrician, it's our kids.

I want to tell you about one of my Flint kids. Her name is Nakala.

In the summer of 2015, Nakala came to clinic for her four-month well child check-up with her older sister Reeva.

Nakala's mom wanted to stop breastfeeding. I urged her to continue, but she said she had to go back to work. She was a waitress, and there was no place to pump in the restaurant except the restroom that all the customers used. She couldn't afford to do anything that jeopardized her job. As it was, she wasn't getting enough hours to make ends meet.

She planned to switch to powdered formula mixed with water but had some concerns. "Is the water all right?" she asked, looking skeptical. "I heard things."

Reeva, the 2-year-old older sister, walked toward me with her hand out. Kids love to distract a doctor who is giving total focus to a younger sibling. So I turned my full attention to Reeva, and she placed a torn scrap of paper—with masterful crayon scribbles—in my open hand.

“Thank you, Reeva,” I whispered. “I’m going to keep this right here in my white coat pocket.”

Soon you will find that the purpose of your white coats is the pockets. Where else would you store your phones, Chapstick, code cards, pen lights and snacks? But it’s also the place you’ll store artwork by kids, if you’re lucky. A place to hold the things that touch you, and teach you, and show you the way.

I sat Reeva down on my lap.

The water. I’d been asked about it before.

“Don’t waste your money on bottled water,” I said, nodding at Nakala’s mom with calm reassurance, the way doctors are taught. “They say it is fine to drink.” Inches away, Reeva, who was on my lap, watched me carefully. I smiled at her again, gave her an extra squeeze and then put her down.

Then I gave her mom another reassuring nod. “The tap water is just fine.”

It’s hard for me to stand here and accept that I said that because everyone here knows now that Flint’s tap water was not “just fine.”

My story, the Flint, Michigan story, is about the unthinkable tragedy of people and their children being poisoned by the most basic and most necessary thing.

It is a story about what happens when the very people responsible for keeping us safe and healthy care more about money and power than they care about the people they are supposed to protect.

But in the summer of 2015, I was a busy pediatrician in Flint. Residency director. Mom. Wife. Juggling lots of balls in the air, as many of you will, trying to find balance.

I was seeing patients like Nakala who would ask about bathing, drinking, mixing formula, and I was telling them, “Of course the water is safe. I mean, how could our water not be safe?”

We live in America, the richest country in the history of the world, it’s the 21st century, and there are rules and regulations and—you know, those anonymous people in lab coats with test tubes—who wake up every day to make sure that when we turn on our tap, the water is safe to drink.

And it’s Michigan. Any Michiganders out there? Show me your hands. We are literally surrounded by the Great Lakes, the largest source of freshwater in the world.

But I was wrong. I learned I was so wrong.

I had been blinded. My eyes couldn't see what my mind didn't know.

Doctors and dentists—each and every single one of you—are all blessed with a gift. A gift that is fleeting, and you must pay attention to it in the moment because it is given only once.

Fresh eyes.

Fresh. Eyes.

You only get to see something for the first time once.

Don't miss it. Don't waste it. In those first moments, you will notice things that will vanish the more times you see it.

The shocking turns into the usual, and the magical withers into the mundane, the known. The accepted.

Like:

The first time you do chest compressions on a child coding in the ED from a gunshot injury.

The first time you order fluids for a diabetic in DKA because she could no longer afford her insulin.

The first time you perform a full mouth extraction due to severe chronic periodontitis and gross dental caries because the patient never ever had dental coverage.

The first time you add measles to your differential for the kid with a fever and rash.

The first time you cradle an opioid-addicted baby to sleep.

But in those first clean, clear moments you get to see things through only your eyes. Before the unthinkable has not only become the thinkable, it's become expected. It's become the norm.

Your clarity of vision shows you the world as it should be, not the imperfect place it is.

As you spend your upcoming years on the frontlines of health, hold on to those fresh eyes. Combine them with the technology and the tools of medicine to make

lives better. Focus them on the people in front of you, but don't forget to step back and look at the bigger picture.

Because when I took a step back, it was all around me. The signs were all around me and I could not and did not see it until I studied it, until I knew it, until I knew it so well that I could not eat and could not sleep because by then I saw badness everywhere.

Making others see it was a whole other thing. I ran up against entire systems built not to see—even when they knew. It was an indifference, a willful ignorance, to certain people, problems and places.

In Flint, they told a population of poor and predominantly minority people to relax, that everything was okay, for a year and a half, while corrosive water, leaching lead, flowed through our pipes and into the homes and bodies of families and children.

It was preventable, but no one stopped it. It was avoidable, but it happened.

And no matter how hard and how scary it seemed, I couldn't close my eyes. I could only go forward. Because no one else was coming.

My role quickly evolved from clinician educator to detective scientist to patient advocate.

I knew that if I was going to make a difference, I would have to prove that our children were in harm's way. You all know how backwards this is. My research never should have been necessary. It never should have gotten to the point where the blood of our children had to be used as detectors of environmental contamination.

Of course, the crisis never should have started, but it should have ended when the first mom held up a jug of brown water. And it definitely should have ended when we knew there was lead in the water.

That is because lead is probably the oldest and most well studied neurotoxin. And I would be remiss, while here on the banks of the Charles River, if I did not reflect on a giant who walked where you walk, who helped bring so much of this knowledge to light.

A century ago, the nation's lead expert and the mother of the field of occupational medicine was physician and social justice pioneer Alice Hamilton.

No, not Alex Hamilton. Alice Hamilton. But they did have something in common: They did not throw away their shot.

After graduating from the University of Michigan medical school in 1893, Alice found herself in Chicago at the Hull House with Jane Addams. No, not John Adams. Jane Addams. Geez.

While providing well child care and wrap-around services to the poor and recent immigrants, she saw—with fresh eyes—that the many ailments that were presenting to her clinic were related to terrible working conditions and exposures: for example, hatters who were going mad from mercury poisoning.

Exactly a century ago she came here to Harvard and became the very first female professor at the university, although her appointment came with several sexist stipulations: no admission into football games, the faculty club or Commencement.

It's nice to see so many women faculty members here today at [Class Day]. Let's give them a round of applause. None of you would have made it to this commencement without them!

Nevertheless, Alice persisted. And what I admire the most about her was her fierce advocacy for her patients.

During her time, General Motors was working to convince our nation that adding lead to gasoline was a good idea, literally a “gift from God.” Alice fought them with all her might, insisting that the introduction of lead into gasoline on a widespread basis would have a catastrophic impact on public health. She was right.

It's reported that she confronted GM's head engineer, Charles Kettering, in a hallway and said, “You're nothing but a murderer.” Who knew medical history could be so dramatic!

From Alice, I learned about lead's toxicity, but more than that, I learned to use science and data to speak truth to power. Alice Hamilton took risks and bucked the status quo as she passionately and humbly fought for the most vulnerable.

Her work wasn't about abstract scientific discovery alone. It wasn't just an academic exercise for the ivory tower, to rack up publications, grants and offers of tenure. It was about people.

Let her Harvard legacy serve as another reminder of what our work should be about.

For me, the work in front of me was clear. I had to work fast, around-the-clock, to see, truly see, what was happening. It took a combination of curiosity, and clinical data pulled from our EMR to find the truth.

And the truth was horrific. Yes, lead was increasingly in the bodies of our Flint children. Lead, a potent irreversible neurotoxin, that science has taught us has no safe level.

There wasn't a moment to spare. There wasn't time to ask permission. This was an emergency and I needed to react like a first responder on the scene; I needed to call a code.

I walked out of my clinic with my white coat on and stood up at a press conference publicly sharing the science, the evidence, that our children were in harm's way, and demanding action.

And even as I offered up facts, my research was met with denials and attacks. The state said I was wrong, unfortunate, and even hysterical.

For a quick minute, I regretted using my voice. I started to doubt myself. I was scared. There was a knot in my stomach, my heart rate was close to 200. And like many of you have probably done, I began to diagnose myself with all sorts of ailments.

I thought to myself, maybe I should have just minded my own business. I had an overwhelming sense of imposter syndrome, that I wasn't good enough. I felt small, even smaller than my usual 5 feet. After all, I was just one pediatrician going against the most powerful forces in the state.

But those thoughts were quickly replaced with the realization that this had nothing to do with me. Every number in my research was not just a number; it was a kid. Kids whom, as a doctor, I have taken an oath to protect.

It was about Billie, who came to see me after he sprained his ankle. And Sasha, who always asks if she can use my stethoscope to listen to her heart. And Jasmine, who at her four-year check-up, when I asked her, "What do you want to be when you grow up," said, "five years old." And it was about Nakala and her sister Reeva, whose masterful artwork is still in my white coat pocket.

All the Flint kids I knew and saw, all the kids that I'd ever known and seen, and all the kids that I had yet to know and see, were jumping out of my spreadsheets, pushing me forward, giving me courage to speak out against a system that wanted me to stay quiet.

I fought back with more data and science, and also with stories of my patients. I was loud and persistent.

And a growing team of resisters was forming around me. Eyes began to open. It became impossible to look away.

It took a while, but the man-made crisis was finally exposed, the state conceded, we went back on Great Lakes-treated water, and most importantly, kids got protected.

Since then, we have been building and sharing our model of hope and recovery.

As much as Flint is a story of a crime committed with absolute indifference against some of the most vulnerable people in the country, it's also a story of all of us. Who we are and who we want to be.

It's a story of medicine leaving the comfort zone of our hospitals, clinics, classrooms and walking into the community, working hand in hand to challenge the status quo.

One lesson you must take from my story is that your degree grants you stature in your community. The "doctor" in front of my name was a megaphone for the kids of Flint. And I used it. I became the voice of health. And in concert with a growing team, we changed the trajectory of an entire city.

I urge you all to be the voice of health. We are depending on you. We have been waiting for you.

Our patients cannot afford to have the guardians of their health shut their eyes, look away and stay silent to injustices that threaten their health.

Pick your injustice—not hard to find.

Sadly, these days, the credibility of science is under attack, from vaccines to climate change. There is so much work to be done:

Regulations and public health agencies like the EPA are being dismantled.

Too many children are born into poverty with ever-widening income inequality.

Health care access for millions is out of reach and may swell.

Rising drug prices stall treatment.

There is a full-out assault on women's bodies and reproductive health.

Gun violence is epidemic and our policy makers are bought.

Slavery's legacy has morphed into mass incarceration.

Children are in cages, separated from their parents and dying at the border.

And like any malignancy, hate and racism and nationalism are spreading all over the world.

This is all happening now. And it's making people sick. Filling hospital beds, dropping life expectancies, and deteriorating our public's health.

This is why we need you. And this is why I'm so hopeful looking out at all of you today.

Use your fresh eyes to not only diagnose problems, but also to prescribe solutions.

We are healers, and healing means not only getting Nakala and Reeva the medical care they deserve, but also seeing beyond the obvious and addressing what truly makes families healthy and happy, like living-wage jobs, income equality, parental leave, affordable housing, nutrition security, restorative justice, clean air and clean water and so much more.

When you take that oath really soon, you are committing to be that healer, that protector.

Sometimes that means being on guard for a city that's being poisoned, and sometimes that means being there for a person whose life is slipping away. Sometimes that means holding one tiny hand in yours, and sometimes that means holding the hands of an entire population.

We cannot predict the exact path that will come before us. I never could have predicted mine: an immigrant who came from someplace else for something better, a doctor who was just doing her job.

You are moments away from setting off on your own path.

Hold on to those fresh eyes. Remember that your work is all about people and it's about all people.

Never forget who you are and the power you now hold. And use it, as it must be used. For good. For people. For building a better world.

Are you ready?

Good. Because it's time to get started. There is no time to spare.

Congratulations and thank you!