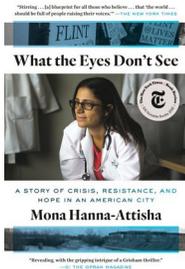


Books by the Stack



What the Eyes Don't See by Mona Hanna-Attisha

A compelling firsthand account of the Flint water crisis traces how 100,000 Americans were poisoned by lead in their water supply with the government's awareness, tracing the pediatrician author's efforts to prove exposure in the face of brutal backlash.

Why you'll like it: *Michigan story. Strong sense of place. Compelling.*

About the Author: Mona Hanna-Attisha, MD, MPH, FAAP, is a physician, scientist, and activist who has been called to testify 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.

Questions for Discussion

1. Dr. Mona writes, "We each have the power to fix things. We can open one another's eyes to problems. We can work together to create a better, safer world" (p. 13). How did Dr. Mona's actions make a difference in the community of Flint? Can you think of a time your own life when you have made other people aware of a problem that they were not aware of? What do you believe you can do as an individual to make the world a better and safer place?
2. During her pediatric residency, Dr. Mona first heard the expression, "The eyes don't see what the mind doesn't know," based on a quote by D. H. Lawrence. Why are pediatricians trained to look beyond what is immediately apparent? Describe a time in your own life when you learned more about a situation once you looked beyond what was visible. What action(s) did you take once you more fully understood the situation? This quote is reflected in the title of the book. What are the other meanings of the title?
3. Why did Dr. Mona initially tell Grace not to use bottled water to make formula for her infant daughter, Nakala? Why did Dr. Mona ignore the news about the contamination of Flint water? How does the media impact our opinions on what is safe and unsafe? How do you choose what media to pay attention to? Have you ever tuned something out, only to later realize its importance?
4. What are adverse childhood experiences (ACEs) and toxic stresses? How can adversities like poverty, racism, and violence impact a child's development? Are you exposed to any toxic stresses in your current, everyday environment? If you are, what can you do to counteract them? How can recognition of the life-long impact of toxic stresses change not only how we treat adults with the consequences of toxic stresses, but also the prevention of exposure to toxic stresses but also the prevention of exposure to toxic stresses?
5. Dr. Mona explains that resilience is not a trait you are born with; rather resilience is learned. She writes, "Just as a child can learn to be resilient, so can a family, a neighborhood, a community, a city. And so can a country" (p. 14). How can a child learn resilience? How can a country learn resilience? What challenges might a community like Flint face in trying to learn resilience?
6. Why did Flint choose to switch its water source to the Flint River? What role did the Emergency Manager Law play in the Flint water crisis? What responsibilities do community leaders have to the citizens of the

community they are representing? Do the leaders in your community answer to local citizens or to other leaders, such as the governor? Why do you think state officials chose to ignore the memo written by Miguel Del Toral of the EPA??

7. Why did Dr. Mona decide to teach her pediatric residents about the history of racial injustice in the United States? What examples did she share when teaching residents about the history of racism in medical care? Why did she believe it was important for her residents to be made aware of the city's weaknesses and needs, while also fostering solidarity with and empathy for Flint's residents? How can pediatric residents support and strengthen their communities?

8. Dr. Mona describes Flint as being in a "man-made state of emergency for forty years" (p. 128), with very high poverty rates, numerous abandoned homes, and little incoming tax revenue. How did practices like racist employment policies, housing segregation, and blockbusting disproportionately affect black families? How did government policies and deindustrialization play roles in the water crisis in Flint? Why did Dr. Mona choose to work in Flint? How was she inspired by the history of Flint and the roles in labor rights, workers, and strikes – especially the women's brigade strikers – in that history?

9. What was your reaction to the fact that, at the beginning of the water crisis, Flint residents were paying some of the highest rates for water in the country? How would this impact personal actions like the recommended practice of flushing faucets? Why does Dr. Mona write, that in the wake of the crisis, many Flint residents were suffering from "community-wide PTSD" (p. 323)? What do you think she meant by that?

10. Had you heard about the water crisis in Washington, D.C., prior to reading this book? Why did the government and local agencies demand proof of impact before changes were made to the water delivery system there? How did the lack of adequate political representation in both Washington, D.C., and Flint influence how the water crises were managed?

11. How did the lack of corrosion control create additional problems in Flint? How did you feel when you learned General Motors switched back to Great Lakes' water after noticing the engine parts were corroding? Why do you think the county health department did not alter medical providers or the public about the increase in cases of Legionnaires' disease? Why do children face such a high risk of poisoning from environmental lead exposure?

12. What complications did Dr. Mona and her team face as they studied the blood lead level (BLL) data of children in Flint? How was their study affected by factors like seasonality, age, and repeated exposure to lead? Why is institutional review board (IRB) approval important for a research study like this? How did Dr. Mona prepare for the public release of her research?

13. Why was the data from Hurley an underestimating of exposure? Why was it important to frame population-wide lead exposure as an additional toxic stress in Flint? How can early interventions and continued advocacy mitigate toxic stress and given children with lead poisoning the best possible chance for recovery? What short-and long-term interventions did Dr. Mona recommend for affected children? What recommendations would you add to such a list of interventions?

14. What is the difference between treatment of individual health and treatment of population health? How can lead exposure have drastic impacts at the population level? How does lead exposure disproportionately affect black people? Do you think it is ethical to use children as detectors of environmental contamination? What is the concept of primary prevention? What kind of policies and programs would need to be adopted to practice primary prevention? How does Dr. Mona's identity as an Iraqi American woman not living in Flint influence her actions? Can you think of a time that your own identity affected how you dealt with a problem?

- 15.** How did Saddam Hussein's brutal and violent rule in Iraq affect Dr. Mona and her family when she was growing up? How did learning about relatives like Dr. Paul Shekwana and Nuri Rafail Koutani impact Dr. Mona as an adult? She writes that she "understood that leaders could be dangerous, that civilizations sat on the delicate edge of a precipice, and that injustice must be challenged" (p. 219). How did her Iraqi immigrant family and social justice heritage impact her thinking? How does this compare to your own thinking about government leaders? What do you think it means to challenge injustice
- 16.** Why was Dr. Mona concerned with the Arab concept of aeb, which she defines as "shame"? How did her family's commitments to justice and equality shape their support of Dr. Mona's work? How did she resist the concept of aeb, both in her response to the Flint water crisis and in her personal life? How have your own personal decisions been influenced by your family relationships?
- 17.** What is primacy? How does primacy between agencies like the Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (MDEQ) affect situations like the Flint water crisis? How do you think state and federal governments should work together to manage environmental crises? Explain your reasoning.
- 18.** What is environmental justice? How does lead exposure exacerbate inequality and the racial education gap? What can residents do in their daily lives to support environmental justice?
- 19.** Dr. Mona was surprised to learn that Marc Edwards was a conservative Republican, given how much they had in common. Why did she assume he was "a leftist activist"? How might their political differences affect how they worked together? Describe a time when you have worked with someone who has different beliefs than you. What did you learn from the experience?
- 20.** How did Dr. Mona use storytelling to communicate the Flint water crisis to the public? Why did she hold up a baby bottle filled with water at her first press conference? How did Dr. Mona use her personality characteristics and personal strengths to her advantage? How was she inspired by Alice Hamilton's advocacy? Describe a time that you used your individual strengths to communicate or act on a problem. Dr. Mona says, "I was also a scientist, an advocate, and now an activist" (p. 266) What do you think the difference is between "advocate" and "activist"?
- 21.** Why was lead added to gasoline, despite most of the world's rejection to lead due to its adverse health effects? How does the past use of lead in gasoline continue to have an impact on the environment today? Why does Dr. Mona refer to Dr. Charles Kettering as a "public health villain" (p. 146)? What is Kehoe's Paradigm (also called the Kehoe Rule)? How did it establish a new precedent that required public health advocates to prove harm before action could be taken?
- 22.** How were scientists and whistle-blowers like Marc Edwards, Miguel Del Toral, and Dr. Mona treated after making their research public? What tactics did organizations like the EPA, the MDEQ, and the state and county health departments use to block scientists from continuing their research or to undermine or discredit their work? How might the Flint water crisis have played out differently if Dr. Mona had received positive responses to her requests for blood lead level (BLL) data? Can you think of other examples when scientific truths have been dismissed?
- 23.** What happened when the Genesee County Health Department declared a public health emergency? Do you think this response was appropriate? How did this later lead to declarations of both citywide and federal states of emergency, as well as a response from the National Guard?
- 24.** Why did Governor Snyder apologize to Dr. Mona? What did you think of her reaction? Do you think the governor should have faced legal consequences for the water crisis? Why or why not?
- 25.** Dr. Mona describes the "real villains" in the Flint water crisis as being "the ongoing effects of racism, inequality, greed, anti-intellectualism, and even laissez-faire neoliberal capitalism. These are powerful

forces most of us don't notice, don't want to" (p. 14) Share your reactions to this opinion. How could the water crisis have been prevented? What policies and practices do you think should be put in place in order to prevent future crises?

26. What are the connections between Dr. Mona's stories of Iraq and those of the flint water crisis? What is the purpose of family stories like Haji and the Birds in the narrative? Are there morality tales from your own family that you cherish and give you strength? What does Dr. Mona mean by "We step over complex systems every day, walking through history and pretending darkness isn't there" (p. 72)?

27. Dr. Mona describes herself as the last piece in a puzzle in revealing the Flint water crisis. What do you think about that description? How did serendipity play a role in exposing the crisis? How did Dr. Mona's friendships, prior to education and training, teamwork and professional network, with Elin, medical, community and political leaders, Marc Edwards, and others play a role? Describe a time in your life when you worked in a team to solve a problem.

28. In discussion about public health pioneer John Snow, Dr. Mona says, "His work wasn't about scientific discovery alone. It was about people and community. That's what science is supposed to be about – not an academic exercise for the ivory tower, or racking up publications, grants, and offers of tenure. It's about using the tools and technology available to make lives better, no matter what articles of faith obstruct the path" (p. 87). Share your reaction to this. What do you think the purpose of science should be? What are the influences in science and academia that threaten that purpose? How was Dr. Mona's presentation of her research before going through the peer review process a form of academic disobedience? Do you recall a time in your life where you did something that was against the norm, but was the right thing to do?

(Questions provided by commonreads.com/Penguin Random House Education)



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