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Bioethics Research Showcase

Something in the Water: The Confluence of Lead, Children's Health, and Democracy in Flint, MI

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What Happened in Flint

Open Under New Management - A Betrayal of Trust:
In April 2013 Flint switched its water source from Detroit Water Sewer Division (DWSD) to the Flint River.[1] Residents started complaining about the water quality by May 2014. Despite reassurances about the water from the emergency manager (EM), residents were later informed by the EPA that the river water's chemistry had released lead from old pipes into the water. In October 2015, state officials found that children who drank water from these old pipes had dangerous levels of lead their blood and brain cells. Since then, Flint has switched back to using Detroit water, but the damage has been done - *the lead is still in their cells*.

A Series of Unfortunate Events:
Physicians and concerned citizens petitioned the government to protect their health. In October of 2014, the General Motors plant in Flint also stopped using the water from the Flint River because it rusted car parts. Then, in January, the water was found to violate the Safe Drinking Water Act

The Role of a Doctor

A Hero for Flint: A local pediatrician, Dr. Hanna-Attisha saw it as her duty to test the children of Flint for severe signs of lead poisoning upon hearing of the city's issues of lead contamination in the water supply.[2] Her studies of routine hospital screenings revealed that the percentage of children with lead poisoning in Flint had *doubled* since the city had switched its water supply. In certain neighborhoods, *up to 16% of children tested* had lead poisoning. Dr. Hannah-Attisha used her position as a community physician to alert the government and media of this issue. The dangers of lead poisoning are not contested, and her actions were in the best interest of the health of Flint's children.

Perseverance Despite Criticism: The Michigan Department of Health and Human Services (MDHHS) was reluctant to share information with Dr. Hanna-Attisha.[1] The media also initially criticised and dismissed her research, but Dr. Hanna-Attisha continued to advocate for her findings, eventually swaying state health officials to take action. Due to her efforts, Dr. Hanna-Attisha prevented more children from becoming exposed to this potent neurotoxin.

American Academy of Pediatrics Position: Pediatricians should use clinical encounters to screen for environmental issues.[3] They should use this data for child advocacy and the development of policy solutions.

Ethical Question: ***When is it right for a physician become an activist?***

A Failure of Democracy

An Unbalanced Budget: After years of declining finances, the State of Michigan placed the City of Flint in "state receivership" under its EM Law because of its $30 million deficit.[4]

- This meant an EM appointed by the governor held power that is usually delegated local elected officials. The EM's job was to restore fiscal order to the city's budget.

Emergency Powers: The EM decided to switch the water supply from DWSD to the Flint River in 2014. When initially pressured by Flint's citizens and state health officials, the EM refused to allow the city to switch back for financial reasons.[1]

Ethics of Poverty: The logic behind the EM Law revokes an individual's right to a representative local government if the government is fiscally unsustainable

- This law disproportionately impacts low income individuals who are more likely to live in economically distressed communities
- State offices installed water coolers to discourage their employees from drinking the water in January 2015. They also provided bottled water.

Ethical Questions: ***How can a state assist economically distressed communities while protecting the right of poor citizens to elect local officials?***
Can a government ethically encourage its employees to take preventative action without informing the broader public?

Recommendations

Children's Health: The children of Flint will need decades of health interventions to support them well into adulthood. They are at risk of anemia, neurological and developmental disorders. The state and federal government, which failed to protect the children of Flint, has an ethical obligation to provide educational, nutritional, and mental health services.

Public Advocacy: Healthcare providers should use Flint as a case study for the importance of public advocacy in caring for patients. Providers should be trained in their role as patient advocates and be given the tools to influence public policies that are related to health.

EM Law: The State should revise its law to ensure the EM balances fiscal responsibility with essential services. EMs should consult with relevant public health and safety experts and in the event of insufficient resources, demand greater State support. They should never purposefully put citizens lives at risk for financial savings.

References:

1. Flint Water Advisory Task Force. Final Report. March 2016.
2. Gupta, Sanjay, Ben Tinker, and Tim Hume. " 'Our mouths were ajar': Doctor's fight to expose Flint's water crisis." *CNN*, January 22, 2016.
3. Council on Community Pediatrics and Committee on Native American Child Health. "Health Equity and Children's Rights." *Pediatrics* Apr 2010, 125 (4) 838-849.
4. Ambrose, Gerald. "Letter to Governor Snyder." April 28, 2015.

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