Hey Flint! It is Safe to Wash!

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Abstract: This article explores invisibilities and inequalities in human rights violations related to The Flint Water Crisis. Five years after lead contaminated the Flint water supply, clean water and safe sanitation have not yet fully returned to the city, while 3,000 communities in the U.S. are estimated to have higher lead levels in their water (Pell and Schneyer, 2016). Outlining the key facts and timeline of the water crisis, the author discusses intersections of human rights, citizenship, and socioeconomic inequalities, focusing on income, health, and knowledge. This article explores the role of public institutions; whose lack of consultation, misleading public health information, and inadequate risk communication resulted in extreme violations of human rights to health, water, and sanitation.

Keywords: Human Rights, Water, Flint, Inequalities.

Introduction

The title of this article - *Hey Flint! It Is Safe to Wash* - originates from a highly criticised public health poster issued by the State of Michigan in December 2015 (Figure 1). A lack of public consultation, failures in accountability, and social inequalities in America's poorest city¹ resulted in extreme violations of the human rights to life, health, water, and sanitation in Flint, Michigan. Arguably, the rights to information, education, the family, and life have also been violated. This essay explores social inequalities in the Flint Water Crisis related to health, information, and income.

¹ Flint's poverty rate of 41.9% is the highest in the U.S. (U.S. Census Bureau: July 1 2017). Data available at: https://www.census.gov/quickfacts/fact/table/flintcitymichigan/PST045216



Figure 1: State of Michigan Health Poster. Source: Detroit Metro Times

When Flint's water supply was switched from Lake Heron to the Flint River in April 2014, it was not properly treated,² resulting in lead poisoning on a massive scale. Despite reports that the water was contaminated,³ local, state, and national agencies dragged their feet until a state of emergency was declared in January 2016.⁴ Butler et al. (2016) pinpoint the initial decision of Flint's Emergency Manager to change the water supply,⁵ and local failures in implementing the

² Corrosive chemicals prevent leaching in lead water pipes and should be used alongside "ferric chloride (to combat infectious bacteria in the water) which increased the likelihood of corrosion" (Grossman and Slusky, 2017: 9-10).

³ "After switching to Flint River water, Flint citizens began complaining about the colour and smell of their water but were continually assured that the water was safe to drink" (Grossman and Slusky, 2017: 4).

⁴ Detroit Free Press (2016).

⁵ In 2011, Michigan appointed an Emergency Manager, a "transient" role that lacked the "sense of accountability held by elected officials" (Butler et al., 2016: 94). With the bankruptcy of Detroit in 2013, the result was "economic-driven decision making that failed to adequately protect the interests of the electorate, and public health" (*ibid*). The role was repealed in January 2018:

http://www.mlive.com/news/flint/index.ssf/2018/01/flint_emergency_manager_order.html

1974 US Safe Drinking Water Act (SDWA)⁶ as the key catalysts of the Flint Water Crisis. In February 2016, the House Committee on Oversight and Government Reform determined that there was "failure at every level of government" in the application of the SWDA in Flint. As clean water slowly returns to the city, this "man-made disaster" continues to disproportionally impact people living in poverty, with the longer-term effects of lead poisoning potentially deepening inequalities for the next generation of Flint residents (Butler et al., 2016: 93). Alarmingly, a recent study estimates 3,000 communities in the United States may have higher lead-water levels than Flint.⁷

A couple of tragic ironies underline the Flint Water Crisis. First, there's the source of the contaminated water. It was common knowledge that the Flint River was polluted, but most residents had no idea they were drinking it. "I thought it was one of those *Onion* articles...We already knew the Flint River was toxic waste" (Rhonda Kelso, Flint Resident cited in Laurie: 2016). Polluted by a now defunct car manufacturing industry⁸ that once provided the majority of jobs in Flint,⁹ "the auto industry has left Flint, taking with it the city's economic success. The economic deprivation of Flint not only gave birth to a drinking water crisis but also exacerbated its effects" (Butler et al.,2016: 93). The second irony is highlighted by Dr. Mona Hanna-Attisha, a paediatrician who researched blood-lead levels in Flint's children: "[w]e were drinking contaminated water in a city that is literally in the middle of the Great Lakes...the largest source of fresh water in the world" (Grossman and Slusky, 2017: 2).

⁶ The SDWA aims to "protect the nation's public drinking water supplies and public health" (Butler et al., 2016:
94). All but one U.S. state has enacted "primacy," which essentially enables self-regulation of water.

⁷ "Reuters found nearly 3,000 areas with recently recorded lead poisoning rates at least double those in Flint during the peak of that city's contamination crisis. And more than 1,100 of these communities had a rate of elevated blood tests at least four times higher" (Pell and Schneyer: 2016).

⁸ Industrial by-products of manufacturing, including "batteries, paints, lacquers, enamels, and gasoline," were dumped, largely unregulated, into the Flint River (Butler et al., 2016: 93).

⁹ Michael Moore's 1989 film *Roger and Me* documents the closure of Flint's Ford Motor Factory it's impact on Flint's residents.

Invisibility and Inequality

Usage of the term 'inequalities' can be understood as "differences that we consider unjust. Inequality is a negation of equality. Behind a perception of inequality there is a notion of injustice, a violation of some equality" (Therborn, 2006: 4). Therborn (2006: 18) evaluated different theoretical models of inequality, finding commonality in three fundamental forms of inequality. The first is "life, health and death," which he terms "vital inequality" (*ibid*: 6). Second, are inequalities that impact "freedom and respect," these the author terms "existential inequalities" (*ibid*). The final form captures the "material and symbolic," which he terms "resource inequality" (*ibid*: 7). Inequalities in the Flint Water Crisis inhabit all three of Therborn's concepts: "vital" in the sense that the water crisis led to "differential exposure to fatal risk;" "existential" in that the institutional responses were typified by "denials of recognition and respect;" while "resource inequality" is identifiable in the pollution of the water supply, the ongoing cost of water, and the fact that lower-income households lacked the disposable income to remedy their water systems and replace their old lead pipes.

Before exploring the concept of *invisibility*, it is pertinent to ground what is meant by *visibility*. Vision encompass both the "immediate sensory sphere" and the concept of "social visibility" (Brighenti, 2010: 4). According to Brighenti (2010: 45), there are three forms of social visibility: recognition, control, and spectacle. Therefore, social *invisibility* can be seen to occupy oppositional spaces of *non-recognition*, *lack of control and the non-spectacle*. The socially invisible undergo an 'othering' process, whereby the 'othering gaze' enables *non-recognition* of the 'other' in the social and the civic (Brighenti, 2010: 27). A *lack of control* can relate to the other's disempowerment, exclusion from policy decisions, and reduced citizen engagement. While the *non-spectacle* exists in a slow-burning tragedy like lead-water poisoning, it also applies to more permanent forms of socioeconomic inequality, such as intergenerational poverty. All of these social forces propagated social invisibility in the Flint case.

Human Rights in the City of Flint

The human rights to water and sanitation intersect with several other rights, including "life, health, gender equality, work, housing, an adequate standard of living, and development" (Meier

et al., 2014: 173). According to General Comment 15 of the UN Committee on Economic, Social, and Cultural Rights (UNCESCR), the human right to water entails "drinking, personal sanitation, washing of clothes, food preparation, personal, and household hygiene" (Pestova, 2016: 160). Water quality must be "free from health hazards, such as micro-organisms, chemical substances and radiation, and of acceptable colour, taste and odour" (*ibid*: 161). Accessibility comprises of three core dimensions: "physical access, affordability, and equal access" (*ibid*: 162). In the Flint case, all these aspects of the human rights to water and sanitation were violated.

A long list of illnesses linked to lead poisoning continue to disproportionally impact Flint's children, pregnant women, and older persons, with around a dozen recorded deaths from Legionnaires Disease. In addition, symptoms yet to display mean that the full scale of the problems facing Flint resident's quality of life are not yet known. Lead poisoning in children often results in "anaemia, kidney damage, colic, muscle weakness, and brain damage" (Butler et al., 2016: 93). In September 2015, an independent health study showed "a substantial increase in blood lead levels in children following the water switch" (Hanna-Attish, 2015 *apud* Grossman and Slusky, 2017: 7). The number of Flint's children affected is so widespread that there is now a dedicated school, Cummings Great Expectations Early Childhood Learning Centre, that caters for children aged 0-4 with symptoms of lead poisoning (Takruri: 2018). Lead is a neurotoxin that can have a detrimental effect on childhood development and cognitive abilities. Children contaminated by lead have had long-term educational prospects put at risk, perhaps irreversibly impacting their human right to education.¹⁰

Exposure to lead during pregnancy can result in "foetal death, premature delivery, low birth weight, and lower intelligence in later childhood" (Butler et al., 2016: 93). Grossman and Slusky (2017: 1) estimated that fertility rates in the Flint area decreased by 12% and fetal death rates increased by 58% during the years of contamination. The authors highlight that pregnant women "had no way of knowing about the lead content in the water" and suggest that "many residents who may have had a stillborn baby or miscarried during the water switch do not realise that

¹⁰ See UDHR, Article 28 (1948), UNESCO Convention against Discrimination in Education (1960), International Covenant on Economic Social and Cultural Rights (1966), and Convention on the Rights of the Child (1989).

exposure to lead increased their risk of these outcomes" (*ibid*: 10/36). Crucially, Grossman and Slusky (2017: 1) also found that the EPA's delayed public health response "reduced the scope of an avoidance behavioural response to the water crisis." This failure to inform potential parents of the risks during pregnancy arguably violated their human rights to health and a family.¹¹

In contaminating public water through neglect, the City of Flint violated the human rights to water and sanitation,¹² as well rights to health, life, education, and a family.¹³ As Pestova (2016: 159) suggests: "[i]n reality the water crisis unfolds locally, where the municipal authorities deal with it at the frontline," while failures to implement the right to water often means local authorities "emerge as immediate violators of the right." A press release from UN Independent Experts regarding Flint highlighted that the water crisis was "fundamentally about human rights" (OHCHR: 2016). The experts noted that "lead is only one of many toxic chemicals to which minorities and the poor are often disproportionately exposed" which invokes "questions of discrimination and inequality" (*ibid*).

The effects of income inequality undermine Flint residents' ability to recover from the water crisis. Flint's most recent poverty rate of 41.9% is the highest in the U.S., with a median household income of just \$25,650 - less than half the national median of \$57,617 (U.S. Census Bureau: 2017). However, according to a comparative study of the country's 500 largest water systems, Flint residents also pay the highest water rates in the U.S., "about \$864 a year for water service, nearly double the national average" (Detroit Free Press: 2016). Takruri (2018) recently put the following question to Flint's Chief Financial Officer: "[w]hy should the people of Flint pay for water that poisoned them, that they don't trust, and in a lot of cases, they don't use?" The fact that the poorest city in the U.S. has the highest water bills is emblematic of income inequality. Adding insult to injury, residents are still being charged for water bills accrued during the crisis.

¹¹ UDHR Articles 16 and 25 (1948).

¹² UN Res. 64/292 July 2010 and UN Human Rights Council (HRC) Res. 15/L.14 affirmed water and sanitation as distinct human rights, and essential components of the right to life in existing treaty commitments.

¹³ UDHR Articles 3, 16, and 25 (1948).

Science and Knowledge

Science is normally presented as neutral. Yet access to the benefits of scientific advancements, and conversely, who is impacted when crucial science knowledge fails to be communicated, are far from neutral. As Santos (2007: 2) suggests, "[i]n the field of knowledge, abyssal thinking consists in granting to modern science the monopoly of the universal distinction between true and false." Below the abyssal line, "there is no real knowledge; there are beliefs, opinions, intuitive or subjective understandings, which, at the most, may become objects or raw materials for scientific enquiry" (*ibid*). Santos (2007: 13) argues that "scientific knowledge is not socially distributed in an equitable manner, nor could it be, as it was originally designed to convert this side of the line into the subject of knowledge and the other side into an object of knowledge." According to Harding (2006: 130), public access to science knowledge is "limited by the real inequality in and between global societies that puts basic scientific literacy out of reach of the world's most economically and politically vulnerable populations." The consolidation of Western scientific knowledge, alongside a devaluation of other forms of knowledge, results in knowledge inequality.

Scientific knowledge-holders in Flint misled the public, then either disavowed, or disappeared within the very public health institutions that were created to protect people. The former head of Michigan Health and Human Services, the Chief Medical Executive, four former Department of Environmental Quality officials, and Flint's last two Emergency Managers all faced charges ranging from corruption to involuntary manslaughter (Detroit News: 2018). Harding (2006: 131) highlights the important role different social movements can play in questioning "problematic aspects of relations between sciences and their societies." This concepts ties into Santos' (2007: 13) call for a "post–abyssal epistemology, the ecology of knowledges," that makes space for, and grants equal status to non-Western knowledges from the South; "forging credibility for non–scientific knowledge," whilst not "discrediting scientific knowledge." Flint demonstrates how science knowledge can be abused by organs of government, exacerbating knowledge inequality with devastating results.

"Flint resident and mother of four," LeeAnne Walters (Langkjær-Bain: 2017), a trained Medical Assistant, identified symptoms of poisoning in her children that included: skin rashes on her 3-year-old twin boys (one of whom had stopped growing), severe abdominal pains in her 14year-old son, and hair loss for her 18-year-old daughter (Laurie: 2016). She contacted Flint officials to get her water tested, then observed "the city employee who tested her water ran the tap for several minutes before taking a sample." Walters questioned this methodology,¹⁴ and began researching and educating herself about water (Langkjær-Bain: 2017). Walters suspected corrosive chemicals were not being used to treat Flint River water and contacted Marc Edwards at Virginia Tech, who independently tested her water, finding lead levels "high enough to qualify as hazardous waste" (*ibid*). An informal coalition of "citizen-scientists" made up of Virginia Tech staff and Flint citizens were then formed by Walters and Edwards to collect samples in the community. The results confirmed widespread lead contamination and eventually "authorities admitted that the citizen-scientists were right: contaminated water was poisoning Flint's residents" (Langkjær-Bain: 2017). In the space where official channels had failed to provide information, test water correctly, and produce results for the public, a combination of shared scientific knowledge, independent research, and citizen action stepped in to perform the duties of public health.

Citizen Engagement and Public Policy

It is important to recognise that The Flint Water Crisis did not appear in isolation. Behind this tragic, ongoing event are a series of political, economic, and policy decisions that in retrospect, were not in the public interest and largely made without consultation. As Wagner (2015: 218) suggests, access to water is especially vulnerable in situations where "governance processes are not transparent and democratic." Within knowledge cultures around citizenship, Somers (2010: 261) discusses the use of narrative structures as "a causal plot that assigns a narrative account of the cause and the resolution of the crisis at hand." Narratives create "veracity through the integrity of their storied form," whilst establishing an "epistemological truth" that "endows the

¹⁴ Walters' instincts were correct. The Flint official breached the Environmental Protection Agency (EPA) Lead and Copper Rule (LCR) for testing: "First-draw" water samples should be "sitting for 6 hours in the plumbing before turning on the faucet" (Butler et al., 2016: 95).

information it conveys with the structure of knowledge, fact, and truth." As Somers (2007: 280) suggests, "[a]t the heart of every narrative is a crisis or flashpoint that cries out for a solution." To an extent, public institutions and organs of power rely on narratives to control public discourse, and manage citizen engagement.

The Flint Water Crisis followed Somers' (2007: 261) three main stages of a narrative structure; "beginning = crisis; middle = struggle; end = resolution." In Flint, beginning: a mistake by officials was then misreported by a handful of 'bad apples', which resulted in water contaminated by lead. Middle: deep concern is expressed, a state of emergency is declared, bottled water and filters are delivered, *but* there is a caveat - the solution is complicated, replacing pipes will take time. End: the resolution came when President Obama arrived and drank a glass of water.¹⁵ When Obama visited in Flint in May 2016, just three months after declaring a state of emergency, he sipped from a glass of tap water at two separate press events, declaring the city's water safe. The crisis was effectively over. Widely disseminated photographs of Obama, glass-to-lips, with the American flag in the background, became the full stop to the Flint Water Crisis (Figure 2).



Figure 2: Obama Drinks Flint Tap Water. Source: Detroit Free Press.

In the case of Flint, decision-makers blindsided the city's residents, placing their health and wellbeing at risk. Somers (2010: 256) emphasises the importance of a healthy "third space" for citizen engagement in civil society that is "in between and independent of both private markets

¹⁵ According to USA Today; "Obama reassured Flint residents that the water is safe now - as long as it's properly filtered" (May 5, 2016).

and administrative state authority" and "free of both coercion and competition." Arguably, the erosion of this "third space" enables violations of rights. Flint emphasises the need to challenge dominant narratives and strengthen civic spaces. There are some encouraging examples of active citizenship and social transformation that are emerging in Flint. The Flint Water Recovery Group is grassroots coalition of over 100 non-profits, churches, community groups, and citizens working together on solutions and services for Flint residents.¹⁶ Michigan has expanded the national Childhood Lead Poisoning Prevention Program (CLPPP), which seeks the "elimination of childhood lead poisoning as a public health problem" by 2020.¹⁷ While recommendations made by Flint's Water Advisory Task Force (2016: 34) include Environmental Justice training across all state agencies in Michigan, a new school water testing program, and improved risk communication guidelines.

Conclusion

What happened in Flint involved institutional misinformation, incompetency, and cover-up.¹⁸ A lack of public engagement and consultation set a dangerous climate. Negative interactions of citizenship and eroded "third spaces" reduced representation and accountability in critical public health decisions. Beneath the surface of Flint's water lay systemic fractures between scientific knowledge and public health. The botched water switch and the timeline of the crisis is a damning indictment of local authorities. Flint rapper Ira Dorsey (Bootleg) sums up the lack of accountability in the Flint Water Crisis: "[i]f I poisoned one person I would be going to jail. But they poisoned a whole city, and no-one is being held accountable" (Takruri, Dena: 2018). In June 2019, all criminal charges against Flint's former officials were abruptly dropped by the prosecution.¹⁹

¹⁶ Read more here: https://flintcares.com/about/

¹⁷ CDC, 2017: https://www.cdc.gov/nceh/lead/about/program.htm

¹⁸ The EPA learnt of high lead levels in Flint's water in April 2015 but did not take decisive action until January 2016 (Butler et al., 2016: 94).

¹⁹ Of the 15 state and local officials facing prosecution, seven took plea deals, while the remaining eight, which included the "highest-ranking officials, were awaiting trial" (Smith, NYT: June 13 2019).

Income, health, and knowledge inequalities present in the Flint Water Crisis contributed to violations of the human rights to education, health, water, sanitation, a family, and life. Hopefully, some of the collective, individual, and institutional responses to inequalities and discrimination in the Flint Water Crisis could help avert, or remedy similar issues in some of the 3,000 communities with lead-water levels estimated to be worse than Flint.

But ultimately, The Flint Water Crisis should make us angry. The following questions continue to burn, and need to be answered: Why does the poorest city in the United States have the highest water bills? How can a city situated in close proximity to the world's largest bodies of fresh water, not have clean water? How do public institutions built to protect people conspire to poison them, and then not tell them about it?

References

- Brighetti, Andrea Mubi (2010), Visibility in Social Theory and Social Research. Palgrave MacMillan: London.
 Butler, Lindsey. J, Scammell, Madeleine, K., & Benson, Eugene B. (2016). "The Flint, Michigan, Water Crisis: A Case Study in Regulatory Failure and Environmental Injustice." Environmental Justice Volume 9, Number 4, 2016. DOI: 10.1089/env.2016.0014
- City of Flint (2016), *Flint Water Advisory Task Force: Final Report*. State of Michigan. Accessed online June 19 2018 from: http://flintwaterstudy.org/2016/03/flint-water-advisory-task-force-final-report/

Detroit Free Press (January 16 2016). Accessed online June 19 2018 from:

https://eu.freep.com/story/news/local/michigan/2016/01/16/president-obama-declares-emergency-flint/78898604/

Detroit Metro Times (January 09 2016), "This Flint water poster from the State of Michigan is ridiculous." Accessed online June 01 2018 from: https://www.metrotimes.com/news-hits/archives/2016/01/09/thisflint-water-poster-from-the-state-of-michigan-is-ridiculous

Detroit News (February 26 2018), "Flint Water Hearing Apathy." Accessed June 18 2018 from: https://eu.detroitnews.com/story/news/michigan/flint-water-crisis/2018/02/26/flint-water-hearingsapathy/110845980/

Grossman, Daniel S. and Slusky, David J.G. (2017), "The Effect of an Increase in Lead in the Water System on Fertility and Birth Outcomes: The Case of Flint, Michigan." Working paper. Accessed June 13, 2018 from: http://www2.ku.edu/~kuwpaper/2017Papers/201703.pdf Harding, Sandra (2006), *Science and Social Theory: Feminist and Postcolonial Issues*. Chicago: University of Illinois Press.

Langkjær-Bain, Robert (2017), "The murky tale of Flint's deceptive water data", Significance, 14(2), 16-21.

- Lurie, Julie (January 21 2016), "Meet the Mom Who Helped Expose Flint's Toxic Water Nightmare", Mother Jones. Accessed June 01 2018 from: https://www.motherjones.com/politics/2016/01/mother-exposed-flint-leadcontamination-water-crisis/
- OHCHR (2016), "Flint: Fundamentally about human rights UN experts underline." Accessed online June 01 2018 from: https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=17139&LangID=E
- Pell, M.B. and Schneyer, Joshua. (December 19, 2016). "The thousands of U.S. locales where lead poisoning is worse than in Flint", Reuters. Accessed June 19, 2018 from: https://www.reuters.com/investigates/special-report/usa-lead-testing/
- Pestova, Natalya (2016), "The human right to water in the city context: insights from domestic litigation," in Oomen, Barbara, Davis, Martha F, and Grigolo, Michele [eds.] (2016), *Global Urban Justice*. Cambridge: Cambridge University Press.
- Santos, Boaventura de Sousa (2007), "Beyond Abyssal Thinking: From Global Lines to Ecologies of Knowledges." Published in Review, XXX-1-2007.
- Simmons, Michelle W. (2007), "Participation and Power: Civic Discourse in Environmental Policy Decisions." New York: State University of New York.
- Smith, Mitch (June 13 2019), "Flint Water Prosecutors Drop Criminal Charges, With Plans to Keep Investigating", New York Times. Accessed July 5 2019 from: https://www.nytimes.com/2019/06/13/us/flint-water-crisischarges-dropped.html
- Somers, Margaret, R. (2010), "Fear and loathing of the public sphere: hoe to unthank a knowledge culture by narrating and denaturalizing Anglo-American citizenship theory," in Genealogies of Citizenship. Cambridge: Cambridge University Press.
- Takruri, Dena (2018, May 15), "Why Flint Still Doesn't Have Clean Water After 4 Years", Direct From AJ+. Accessed June 01, 2018: https://www.youtube.com/watch?v=9iCdkjW4YQ8
- Therborn, Goran (ed.) (2006), "Meaning, Mechanisms, Patterns, and Forces: An Introduction," in *Inequalities of the World*. Verso: London.
- United Nations General Assembly (1948), Universal Declaration of Human Rights. Accessed June 19, 2018 from: http://hrlibrary.umn.edu/instree/b1udhr.htm
- United Nations General Assembly (2010), *Resolution 64/292*. Accessed January 29 2018 from: http://www.un.org/es/comun/docs/?symbol=A/RES/64/292&lang=E
- United Nations Human Rights Council (2010), *Resolution 15/L.14*. Accessed online January 29 2018 from: http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/RES/15/9
- Wagner, John R (2015), "Governance," in The Social Life of Water. New York: Berghahn Books.

Wisely, John, (February 17 2017). "Flint residents paid America's highest water rates", *Detroit Free Press*.
 Accessed 19 June 2018 from: https://eu.freep.com/story/news/local/michigan/flint-water-crisis/2016/02/16/study-flint-paid-highest-rate-us-water/80461288/