# **UC Davis**

# **UC Davis Previously Published Works**

# **Title**

COVID-19's Still-Urgent Lessons of Structural Inequality and Child Health in the United States.

# **Permalink**

https://escholarship.org/uc/item/3tw3n7pd

# **Journal**

Journal of the National Medical Association, 115(3)

# **ISSN**

0027-9684

## **Authors**

Murray-Garcia, Jann Ngo, Victoria Garcia, Erik Fernandez Y

# **Publication Date**

2023-06-01

## DOI

10.1016/j.jnma.2023.03.004

Peer reviewed



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

# COVID-19's Still-Urgent Lessons of Structural Inequality and Child Health in the United States

Jann Murray-Garcia, Victoria Ngo, Postdoctoral Fellow, Erik Fernandez y Garcia

Funding Source: The authors did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors. Declaration of Interests: None Abstract: COVID-19's lessons on structural inequality should have been painful and embarrassing to all of us. These daily experiences of an unacceptable status quo among US children are still with us in a post-COVID America. Addressing the multi-sectoral factors that undermine the nation's health should remain urgent priorities for all health professionals. Keywords: Inequality ■ Racism ■ Health Disparities ■ Child Health

Author affiliations: Jann Murray-Garcia University of California Davis Betty Irene Moore School of Nursing 2570 48th St., Sacramento, CA 95817, USA; Victoria Ngo University of California Davis Betty Irene Moore School of Nursing 2570 48th St., Sacramento, CA 95817, USA; Erik Fernandez y Garcia University of California Davis School of Medicine, Department of Pediatrics, Division of General Pediatrics 2516 Stockton Blvd, Suite 334, Sacramento, CA 95817, USA

Corresponding author at: Department of Pediatrics, University of California Davis Health, 2516 Stockton Blvd, Suite 334, Sacramento, CA 95817, USA. emails: jmurraygarcia@ucdavis.edu, vxngo@ucdavis.edu, efernandezygarcia@ucdavis.edu

Published by Flsevier Inc. on behalf of National Medical Association. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/)

https://doi.org/10.1016/j.jnma.2023.03.004

# 1. INTRODUCTION

COVID-19 was a brutal teacher worldwide and continues to render its instruction in the wealthiest country in the world. The lessons of death, some in isolation without family farewells, healthcare workers facing danger inadequately protected, and previously unimaginable levels of unemployment and economic loss have been heartwrenching. These tragedies happened in microcosm repeatedly with every new surge in cases across the nation. When it is finally all over, many of this pandemic's lessons will come to light through retrospective research hopefully many of us will conduct. For now it is worth pausing to note what was true in the United States before this pandemic emerged and what will remain true after the COVID-19 pandemic is officially declared over: substantial structural inequalities define some children and adolescents' daily realities and undermine their health.

# 2. CORONAVIRUS HAS NOT BEEN A **GREAT EQUALIZER – IT HAS LAID BARE** OUR INEQUITIES.<sup>1</sup>

Structural inequality<sup>2,3</sup> is defined by a network of interlocking social institutions and policies that systematically and by default, confers and maintains advantages for some while putting others at disadvantage in their capacities to benefit from the nation's shared resources and opportunities. With forces that are so diffusely and yet insidiously embedded in our lives together that they are essentially invisible to the untrained eye, no one individual actor can be blamed for negative and unequal outcomes.

Results of this structural inequality are predictable, hierarchical, and, over generations, faithfully reproducible by race, ethnicity, gender, class and geography. Especially relevant for those pediatric and public health professionals entrusted with the healthy development of children and adolescents, Russel and Levin<sup>3</sup> point out the following: "These institutions are socializing agents - we learn about ourselves and other people from our families, our schools, our government and criminal justice systems,

Hence, we arrived at a crisis like that caused by SARS-Covid-2, and once again, stark racial inequalities in incidence and mortality rightfully become front and center, grabbing the headlines for a time.<sup>4</sup> And yet, the systemic inequality responsible for the unequal burden of this coronavirus' catastrophic effects was there every day in pre-COVID-19 America. That structural inequality is rarely problematized at this scale, especially after panicked headlines of a crisis like COVID have receded.

This discussion asks three questions. First, we explore two aspects of everyday life in America that represent basic building blocks of healthy child and adolescent development: the availability of adequate, healthy food and the availability of safe, high quality, running water. Then we discuss the digital divide of everyday life that predictably leads to divergent, unequal life outcomes for America's children. (Note on terminology: We use COVID-19, the illness, and SARS-Covid-2, the virus, interchangeably.)

# 3. QUESTION #1: HOW IS IT WE HAVE CREATED A NATION WHERE, AS IN 2020, IF CHILDREN DO NOT PHYSICALLY GO TO SCHOOL, THEY MIGHT NOT EAT?

As U.S. cities tried to halt the spread of COVID-19, part of the hesitancy and delay of municipalities and school districts had to do with how children would eat if the schools were closed. <sup>5,6</sup> Every day in pre-COVID America, an estimated 29.7 million children relied on the National School Lunch Program (NSLP). This was over half (52.5%) of the nation's school children, and included 29% of White children, 36% of Asian children, 68% of Native American children, 74% of Black children, and 77% of Latinx/Hispanic children. The NSLP provides free lunch to children with family incomes at or below 130% of poverty, and reduced price lunch to children with family incomes between 130 and 185% of poverty. The School Breakfast Programs serves 11.6 million students each morning, with the same eligibility requirements.

During the COVID-19 stay-at-home orders, one special group at particular risk for not accessing adequate nutrition in the face of lost school lunches and breakfasts was the 8.3 million US children who live in households with at least one non-citizen adult. Families with non-citizen adults have increasingly declined government assistance programs despite their U.S. citizen-children being eligible for such assistance. There are fears of incurring "public charge," despite state and federal government messaging ensuring that seeking food for their children will not be held against them. <sup>10,11</sup>

# 4. QUESTION #2: HOW IS IT THAT, AS IN 2020, WE HAVE CREATED A NATION WHERE THERE ARE NATIVE AMERICAN RESERVATIONS AND OTHER AREAS WHERE CHILDREN AND FAMILIES HAVE NO RUNNING WATER?

Couched between other announcements during the April 10, 2020 daily press briefing of the Coronavirus Task Force, U.S. Surgeon General, Jerome Adams, MD, MPH, reminded the nation, "We tell people to wash their hands, but as studies showed, 30 percent of the homes on Navajo Nation don't have running water. So how are they going to do that?" This is a harsh reminder of the pre-COVID daily normal for some U.S. children and their families.

Today in America, 1.4 million people do not have access to high quality running water, indoor plumbing

(hot water, flushable toilets), nor to sewage systems that take human waste away from their homes to treatment plants. <sup>13</sup> In some cases, sewage mixes with the surface soil in children's backyards. Native American households are 19 times more likely than White families to lack indoor plumbing, including almost one out of three homes on the Navajo Nation reservation, which is the geographic size of West Virginia. <sup>13</sup>

In 2019, race was the strongest predictor of whether a household has adequate plumbing, including safe, high quality drinking water. Mona Hannah-Attisha, MD, MPH, the pediatrician-hero, and her colleagues against the denials of local and state public officials, revealed Flint, Michigan municipal water department's cost-savings measures that left many of the children of Flint, Michigan poisoned with lead. Forty-four million people in the U.S. utilize water systems that have serious water violations. The National Resources Defense Council reports that between 2016 and 2019, "race, ethnicity, and language had the strongest relationship to slow and inadequate enforcement of the Safe Drinking Water Act." 15

# 5. QUESTION #3: HOW IS IT THAT, AS IN 2020, WE HAVE NOT MADE IT POSSIBLE FOR ALL CHILDREN TO HAVE ACCESS TO RELIABLE, AFFORDABLE INTERNET SERVICES THAT OTHER CHILDREN USE TO LEARN AND COMPETE IN A WIRED 21ST CENTURY AMERICA?

The COVID-19 crisis revealed an inequitable status quo that we will likely return to after the captured public attention of COVID-19 dissipates. As technology continues to develop, new digital platforms and tools are shaping how children are connecting and interacting with the world around them, and how they will learn in and outside of schools. Former President Obama announced with the launch of the ConnectHome pilot program in 2015, "The Internet is not a luxury, it is a necessity." <sup>16</sup>

School closure due to the COVID-19 pandemic prompted 56 million students (K-12) to access education online. Despite the improvement of high-speed internet access in the last few years, in pre-COVID-19 America, more than 9 million children still lived without high-speed internet access at home. <sup>17,18</sup> Additionally, many did not have the proper devices to access the internet, affecting their ability to complete or turn in assignments in a timely manner.

Pre-COVID-19, Black and Latinx/Hispanic children were more than three times more likely than White and

Asian children to access their home's internet only by cell phone, a device whose usage can be interrupted by nonpayment or data usage restrictions and may be shared by multiple family members for this purpose. 18,19 The Pew Research Center reported that "one-in-five teens ages 13 to 17 (17%) said they are often or sometimes unable to complete homework assignments because they do not have reliable access to a computer or internet connection," including one out of four Black children and those whose families earned less than \$30,000 per year.<sup>20</sup> It should come as no surprise that school districts reported that there were children and teens whose online school attendance during the stay-at-home orders and following had been spotty, if existent at all.<sup>21</sup>

Recent college admissions cheating scandals engendered widespread disgust and offended our sensibilities regarding meritocracy and fairness in the academic competition that defines American schooling.<sup>22</sup> But COVID-19 embarrassingly reminded us of the digital divide of everyday life that predictably leads to divergent, unequal life outcomes for America's children. "Fair" is not possible in a pre-COVID-19 or a post-COVID America.

# 6. "WE'VE NEVER BEEN IN IT ALL TOGETHER."23

"We're all in this together" was the feel-good mantra during the period of stay-at-home orders during Spring 2020. Nikole Hannah-Jones, 23 New York Times investigative reporter and MacArthur Genius Award winner asserts, "We've never been in it all together. And we're certainly not all in it together now." COVID-19 was a painful reminder of that.

We were appropriately in crisis mode trying to prevent, for example, the starvation of children and their families during school closures and unprecedented levels of unemployment. As we move back (or forward?) towards a "new normal," several questions beg to be asked: How did we get here to this steady state, this tacitly normalized, daily pre-COVID inequality? Did our nation have an activated plan to remedy the ongoing structural inequality of our pre-COVID daily reality?

We have seen pediatric providers and public health professionals act with great success in reducing the impact of structural inequality in the U.S. In 1997, the American Academy of Pediatrics (AAP) celebrated its successful advocacy in the signing into law of the Children's Health Insurance Program.<sup>24</sup> In coalition with the American Bar Association, and the American Psychological Association, the AAP called attention to the unnecessarily excessive number of out-of-school suspensions nationwide. Informing and supporting the Obama Justice Department's

2014 call to reduce school suspensions, the number of out-of-school suspensions annually across the nation has plummeted by the hundreds of thousands. 25,26 Alongside widespread activism against family separation at the U.S. Mexico border in 2019, former AAP President Colleen Kraft's timely warnings of the dire, possibly lifelong health impacts on infants, children, and teens of this trauma likely played a major role in exposing the cruel implementation of this policy.<sup>27</sup>

These previous pediatric research and health efforts dismantling or mitigating the effects of structural inequality demonstrate that we can bring that passion and effective efforts to bear on the impact of structural inequalities potentiated by COVID-19. Indeed, the AAP has begun to engage the issues as they have in their past successes, with their guidance for reopening schools. This guidance is based on their argument that "[b]eyond supporting the educational development of children and adolescents, schools play a critical role in addressing racial and social inequity. As such, it is critical to reflect on the differential impact the COVID-19 pandemic and the associated school closures have had on different racial and ethnic groups and vulnerable populations. The disparities in school funding, quality of school facilities, educational staffing, and resources for enriching curriculum between schools have been exacerbated by the pandemic. Families rely on schools to provide childcare; a safe, stimulating space for children to learn; opportunities for socialization; and access to school-based mental, physical, and nutritional health services. Without adequate support for families to access these services, disparities will likely worsen, especially for children who are English language learners, children with disabilities, children living in poverty, and children of African American/Black, Latinx/Hispanic, and Native American/Alaska Native origin."28

Changing the pre-COVID-19 reality for half of U.S. children who depend on school to stave off hunger and malnutrition, families across the country need a living wage. Especially as we now (finally) recognize their parents as "essential" workers, it makes sense to re-commit to the creativity and advocacy required for the removal of barriers to economic success and wealth-building for all American families.

We should hold publicly accountable federal, state, and municipal governments for completing water delivery and waste treatment systems to all Americans, especially Native American reservations, in California's Central Valley, Texas border towns, and numerous other rural communities.<sup>29</sup> Indeed, the very existence of Native American reservations reminds us of the nation's theft of the most arable, irrigatable land, now inhabited and enjoyed

by many of us.<sup>30</sup> This health-stealing structural inequality may be less complex to resolve than we think. George McGraw, CEO of DigDeep water advocacy group, reports that in 2015, the organization installed cisterns and electric pumps, bringing hot water for showers and the tap for over 200 homes on the Navajo Nation at the relatively paltry price of \$4000 per household.<sup>29</sup>

Making basic broadband freely available to all families, as it incompletely had been during the COVID crisis, not only enhances children, teens, and our nation's competitiveness in the 21st century economy. The continued provision of free broadband at a basic level also goes a long way to supporting what has now become a critical part of holistic child and adolescent development in a wired society.

It is past time to move forward to a 21st century reality in the United States where we can truly all "be in this together," addressing the structural inequalities that daily undermine the foundations of child health. Recently, in specific reference to racial injustice, Fuentes-Afflick has poignantly and rightly called for not only "innovative, widespread societal action," but also "a complex, multifaceted series of strategies and tactics... and more research to develop and test interventions" that will lead us to health equity and to what she calls an "equity culture in pediatrics." <sup>31</sup>

Racial and other structural inequalities are part of the status quo that defined pre-COVID and today's America. It is possible that the routineness and dailyness of their reality has shocked us, embarrassed us even. That would be a good thing. We should pursue the dismantling of these social determinants of health with more urgency as we arrive at or back to a new "normal." Optimal and equitable population health requires that we relentlessly interrogate "normal" through research and policy discussions, proactively transform "normal," and design, accelerate and evaluate efforts at dismantling structural inequality in our nation's daily reality, on behalf of many American children, teens, and their families.

# **REFERENCES**

- Aleem Z. New CDC data shows COVID-19 is affecting African Americans at exceptionally high rates. Vox [Internet]. April 18, 2020. Available from: https://www.vox.com/coronaviruscovid19/2020/4/18/21226225/coronavirus-black-cdcinfection.
- Rahman KS. Constructing and contesting structural inequality. Crit Anal Law. 2018;5(1):99–124.
- Russell HL, Levin A, Levin Abigail. Fall Quarter. Instructor guide for block 5a: structural Inequality [course] New York: Niagara University Beginnings; 2016 Available at https://sites.niagara. edu/assets/Uploads/F165a3.pdf.

- 4. Owen W, Carmona R, Pomeroy C. Failing another stress test on health disparities. JAMA. 2020;323(19):1905–1906.
- Bauer L. The COVID-19 Crisis has Already Left Too Many Children Hungry in America. Brookings; May 6, 2020 Available at https://www.brookings.edu/blog/up-front/2020/05/06/the-covid-19-crisis-has-already-left-too-many-children-hungry-in-america/.
- Hake M, Engelhard E, Dewey A, Gundersen C. The Impact of the Coronavirus on Child Food Insecurity Chicago, IL: Feeding America; May 19, 2020 Available at https://www. feedingamerica.org/research/coronavirus-hunger-research.
- National School Lunch Program. U.S. Department of Agriculture, Economic Research service. August 2019. Available at <a href="https://www.ers.usda.gov/topics/food-nutrition-assistance/child-nutrition-programs/national-school-lunch-program/">https://www.ers.usda.gov/topics/food-nutrition-assistance/child-nutrition-programs/national-school-lunch-program/</a>.
- 8. Status and Trends in the Education of Racial and Ethnic Minorities. National Center for Education Statistics; 2010 JulyAvailable at https://nces.ed.gov/pubs2010/2010015/indicator2\_8.asp.
- Operations Manual ICE Performance-Based National Detention Standards 2016 Revisions Washington, DC: Department of Homeland Security; 2011 Available at <a href="https://www.ice.gov/detention-standards/2011#wcm-survey-target-id">https://www.ice.gov/detention-standards/2011#wcm-survey-target-id</a> opens in new tab.
- Page K, Venkataramani M, Byrer C, Polk S. Undocumented U.S. immigrants and COVID-19. N Engl J Med. 2020. 382:e62Available at. https://www.nejm.org/doi/full/10. 1056/NEJMp2005953.
- COVID-19 Guidance for Immigrant Californians. State of California. https://covid19.ca.gov/img/wp/covid-19-immigrant-guidance-accessible-1-2.pdf.
- 12. Coronavirus Task Force Press Briefing. April 10, 2020. Available at https://www.whitehouse.gov/briefings-statements/remarks-president-trump-vice-president-pence-members-coronavirus-task-force-press-briefing-24/.
- Dig Deep and U.S. Water Alliance. Closing the water access gap in the United States: a National Action Plan. 2019. Available at http://uswateralliance.org/sites/uswateralliance.org/files/Closing%20the%20Water%20Access%20Gap%20in%20the%20United%20States\_DIGITAL.pdf.
- Hanna-Attisha M. What the Eyes Don't See: A Story of Crisis, Resistance, and Hope in an American City New York: Penguin Random House LLC; 2018.
- National Resources Defense Council. Watered down justice. 2019. Available at https://www.nrdc.org/resources/watered-down-justice.
- 16. Olanoff, D. President Obama: "The internet is not a luxury, it is a necessity." Tech Crunch. July 15, 2015.
- Kewal Ramani A., Zhang J., Wang X., Rathbun A., Diliberti M., and Zhang J. Student access to digital learning resources outside of the classroom. National Center for Education Statistics 2017-098. 2018. Avaliable at https://nces.ed.gov/pubsearch/ pubsinfo.asp?pubid=2017098.
- USA Facts. More than 9 million children lack internet access at home for online learning. Available at https://usafacts.org/ articles/internet-access-students-at-home/.
- National Center for Education Statistics. Children's internet access at home. 2020. Available at https://nces.ed.gov/ programs/coe/pdf/coe\_cch.pdf.

- 20. Pew Research Center. "As schools close due to coronavirus, some U.S. students face a digital 'homework gap.'" March 16, 2020. Available at https://www.pewresearch. org/fact-tank/2020/03/16/as-schools-close-due-to-thecoronavirus-some-u-s-students-face-a-digital-homeworkgap/.
- 21. Sen A., Tucker C.E. Social distancing and school closures: documenting disparity in internet access among school children. Available at SSRN 3572922. 2020 Apr 10.
- 22. Jaschik S. New evidence in admissions scandal. Inside Higher Ed, January 27, 2020. Available at https:// www.insidehighered.com/admissions/article/2020/01/27/ new-evidence-admissions-scandal.
- 23. Hannah-Jones N. In "BET News and Facebook present: COVID-19: Black America's fight," a primetime news special in partnership with CBS News. April 22, 2020. Available at https://www. facebook.com/NewsBET/videos/224649505539389.
- 24. "Landmarks in the History of the American Academy of Pediatrics Lawrence Gartner, MD, FAAP and Carol Gartner, PhD Pediatric History Center." 2020. Available at https://www.aap. org/en-us/about-the-aap/Gartner-Pediatric-History-Center/ Pages/AAP-History.aspx.
- 25. Ward SF. Less than zero: schools are rethinking zero tolerance policies and questioning whether the discipline is really effective. Am Bar Assoc J. 2014;100(8):54-61.

- 26. Kamenetz A. Suspensions Are Down in U.S. Schools but Large Racial Gaps Remain. National Public Radio; December 17, 2018 Available at <a href="https://www.npr.org/">https://www.npr.org/</a> 2018/12/17/677508707/suspensions-are-down-in-u-s-schoolsbut-large-racial-gaps-remain.
- 27. Jenco M. AAP renews call for an end to family separation at the border. January 18, 2019. Available at https://www.aappublications.org/news/aapnewsmag/2019/ 01/18/immigration011819.full.pdf.
- 28. American Academy of Pediatrics. COVID-19 planning considerations: guidance for School entry. August 18, 2020. Available at https://services.aap.org/ en/pages/2019-novel-coronavirus-covid-19-infections/ clinical-guidance/covid-19-planning-considerations-returnto-in-person-education-in-schools/.
- 29. McGraw G. For these Americans, clean water is a luxury. New York Times, October 20, 2016. Availhttps://www.nytimes.com/2016/10/20/opinion/ for-these-americans-clean-water-is-a-luxury.html.
- 30. Dunbar-Ortiz R. An Indigenous People's History of the United States Boston: Beacon Press; 2014.
- 31. Fuentes-Afflick E. Equity culture in pediatrics. Pediatr Res. 2020 Nov 23:1-2.